

KILADZE, R.M.

Calculating the parameters of a positive surge wave taking into consideration the curvature of the flow. Soob. AN Gruz. SSR 20 no. 2:143-150 F '58. (MIRA 11:7)

1. Tbilisskiy nauchno-issledovatel'skiy institut sooruzheniy i gidroenergetiki. Predstavleno akademikom K.S.Zavriyevym.
(Waves)

KILADZE, R.M.

Determining the size of surge waves in channels with irregular cross sections. Soob. AN Gruz.SSR 21 no.3:271-276 S '58.
(MIRA 12:4)

1. Tbilisskiy nauchno-issledovatel'skiy institut sooruzheniy i gidroenergetiki. Predstavleno akademikom K.S. Zavriyevym.
(Hydraulics) (Canals)

KILADZE, R.M. (Tbilisi)

Calculation of the backwater wave in a trapezoidal channel.
Izv. AN SSSR. Otd. tekhn. nauk. Energ. i avtom. no.5:185-188
S-0 '59. (MIRA 13:1)
(Hydroelectric power stations) (Hydrodynamics)

KILADZE, R. M., CAND IECH SCI, ^{study} "INVESTIGATION OF THE
TRANSFORMATION OF WAVES OF ^{a single} ~~ONE~~ DIRECTION IN THE ^{irregular} ~~TRANSIENT~~
MOVEMENT OF WATER IN OPEN CHANNELS." TBILISI. PUBLISHING
HOUSE OF ~~THE~~ ⁿ GEORGIA POLYTECH INST, 1961. (STATE COM ^{minutes of} ~~FOR~~
HIGHER AND SEC SPEC ED OF THE COUNCIL OF MINISTERS GSSR.
ORDER OF LABOR RED BANNER GEORGIA ⁿ POLYTECH INST IMENI V. I.
LENIN). (KL-DV, 11-61, 220).

KILADZE, R.M.

Transformation of unidirectional waves. Soob. AN Gruz. SSR 26
no.5:521-526 My '61. (MIRA 14:8)

1. Tbilisskiy nauchno-issledovatel'skiy institut sooruzheniy i
gidroenergetiki imeni A.V. Vintera, Tbilisi. Predstavleno
akademikom K.S. Zavriyevym.

(Waves)

KHAME, R.N.

Hydraulic characteristics of a flow in case of a straight and
back wave motion on a slope. Secb. AN Gruz. SSR 39 no.1:129-
135 JI '65. (MIRA 18:10)

1. Gruzinskiy nauchno-issledovatel'skiy institut gidrotekhniki
i melioratsii. Submitted November 22, 1964.

ACC NR: AR7004110 (2) SOURCE CODE: UR/0169/66/000/012/V044/V044

AUTHOR: Kiladze, R. M.

TITLE: Forecasting river floods using computers

SOURCE: Ref. zh. Geofizika, Abs. 12V283

REF SOURCE: Tr. Gruz. n. -i. in-ta gidrotekhn. i melior., vyp. 23, 1965, 103-112

TOPIC TAGS: flow rate, water, river flood, flow, inverse characteristic, integration

ABSTRACT: Using Saint-Venant equations in the characteristic form, the set of inverse characteristics is replaced by an equation of continuity between the flow rate and water level obtained from the discontinuity equation. A rectangular net is used for the numerical integration of the obtained system of equations. The method was verified by means of calculating the nonsteady-state motion in rectangular duct presented by G. Stoker in his monograph entitled "Waves on water". Results of the calculations agree with results obtained by Stoker. The bibliography has 5 titles.

SUB CODE: 08/

Translation of abstract/

[KP]

Card 1/1

UDC: 551.482.215.3

KILANOWSKI, K.

KILANOWSKI, K.

Some problems of forest nurseries, p. 4. (IAS POLSKI, ^{Warszawa}Vol. 27, no. 3, Mar. 1953.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. ⁴6, Jan. 1955, Uncl.

KILANOWSKI, W.

The world situation of the flax industry. p. 112.

PRZEGLAD WLOKIENNICZY. (Stowaryszenie Inzynierow i Technikow Przemyslu Wlokienniczego) Lodz, Poland, Vol. 13, No. 3, Mar. 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, No. 2, Feb. 1959.

Uncl.

KILANOWSKI, Włodzimiers; Dyrektor Instytutu Przemysłu Włókien Lykowych,
Poznan.

Technology development plan for 1963 as instrument of the
leading role of the Institute. Przegl włokien 17 no. 1:
Supplement: Biul inst przem lyk 10 no. 1:1-2 Ja '63.

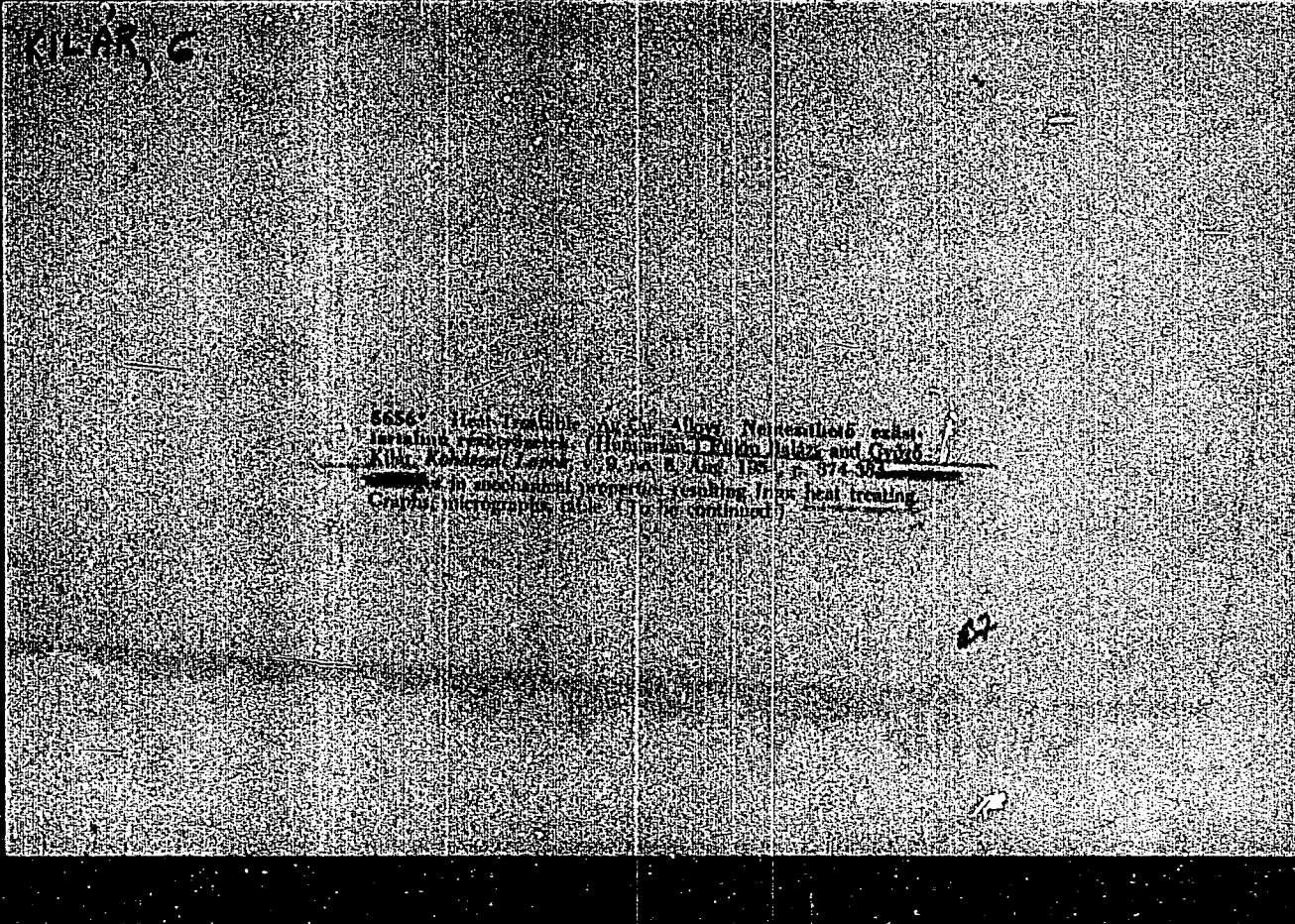
KILANOWSKI, Miodoszlana, Inz.

Works of the Industrial Institute of Bast Fibers in the years
1963-1964. Prace włokien 18 no.9:Suppl:Biul Inst przez włok
lyk 11 no.4:1-4 S '64.

KILAR, Gy.; BALANS, P.

"Copper Alloys with Silver Content Which Could Be Refined. Pt. 1" (To Be Continued), P. 371, (KOHLEKATI LAPOK, Vol. 9, No. 8, August 1954, Budapest, Hungary)

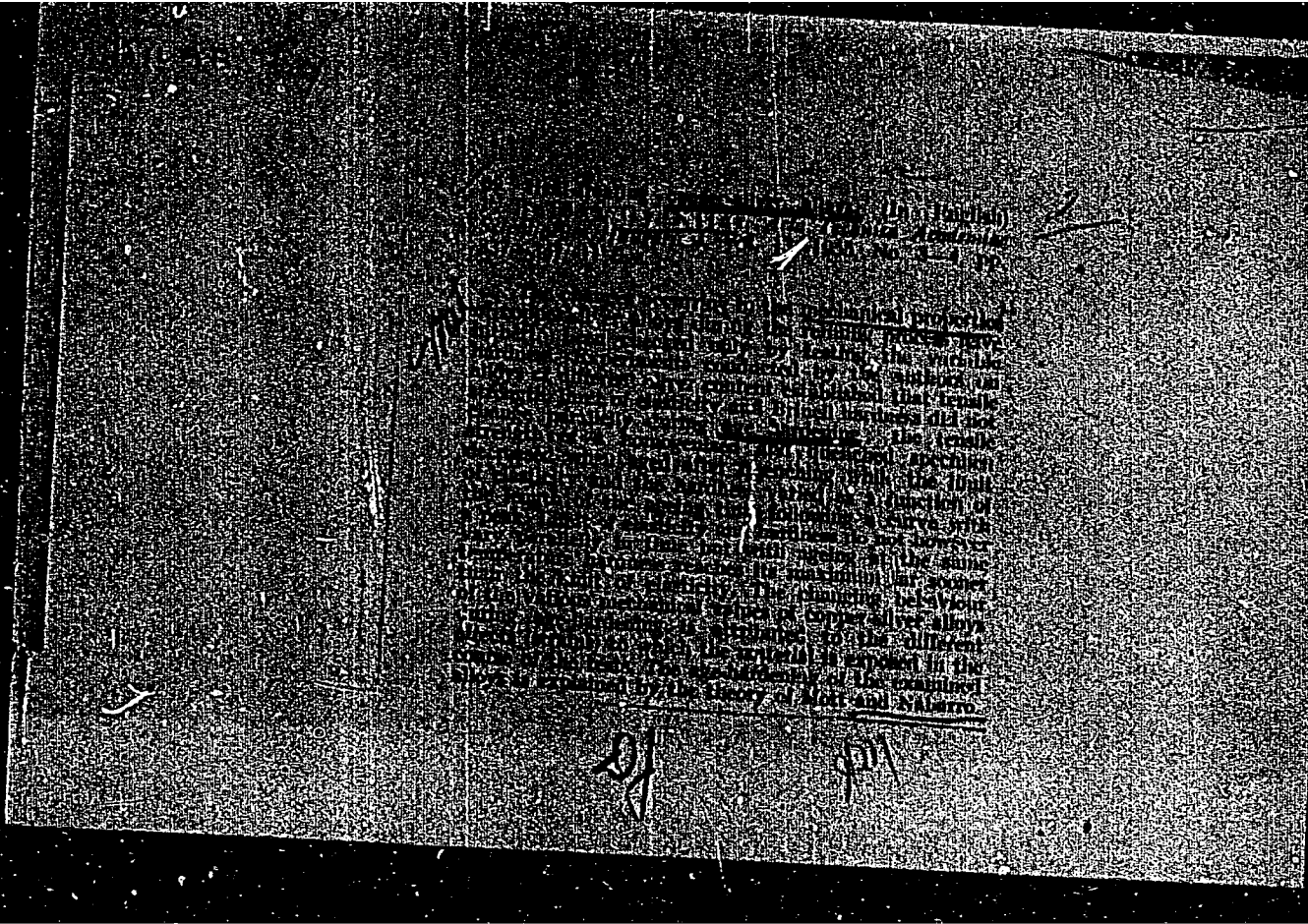
FC: Monthly List of East European Accessions (MEMO), 10, Vol. 4, No. 3, March 1955, Uncl.



HILAR, CY.

HILAR, CY. Copper alloys with silver content which could be refined. Pt. 2.
p. 420. HUNGARIAN ARCH. Budapest. Vol. 9, no. 3, Sept. 1954.

SOURCE: East European accession list (EEL) LC Vol. 9, no. 3 June 1956



BALAZS, Fulop; KILAR, Gyozo

Refinable silver containing copper alloys. Koh lap 9 no. 9:
420-423 S '54.

NAGY, László; KILAR, Sarolta

Mechanism of energy exchange and decrease in body temperature in anoxia in rats. Kiserletes orvostud. 8 no.4:403-406 July 56.

1. Pecséi Orvostudományi Egységen Kísérleti Intézet.

(ANOXIA, exper.

eff. on body temperature & oxygen consumption in rats (Hun))

(BODY TEMPERATURE

eff. of exper. anoxia in rats (Hun))

(METABOLISM

oxygen consumption, eff. of exper. anoxia in rats (Hun))

NAGY, L.; KIIAR, S.

Effects of changes in thyroid gland function, adaptation to low molecular-oxygen tension and polyglobulia on hypoxic metabolism and decrease in body temperature. Kiserletes orvostud. 10 no.4:430-432 Aug 58.

1. Pecsí Orvostudományi Egyetem Korelettani Intézete.

(ANOXIA, exper.

eff. of adaptation to low oxygen tension, polycythemia vera & changes in thyroid funct. on metab. & body temperature in anoxic rats (Hun))

(METABOLISM

same)

(BODY TEMPERATURE

same)

(THYROID GLAND, physiol.

eff. of changes in thyroid funct. on metab. & body temperature in anoxic rats (Hun))

(POLYCYTHEMIA VERA, exper.

eff. on metab. & Body temperature in anoxic rats (Hun))

JACKUNAS, Kazis, kand. sel'khoz. nauk; KILAS, M., red.; LUKOSEVICIUS, St.,
tekm. red.

[Raising young poultry] Paukacių prieauglio auginimas. Vilnius,
Valstybinė politinės ir mokslinės literatūros leidykla, 1961.
44 p. (MIRA 15:3)

(Poultry)

JASUDENAS, M.; SILIŠIS, V.; ŠIMUKONYTE, R.; KILAS, M., red.

[Regionally adopted varieties of agricultural cultures in
the Lithuanian S.S.R.] Lietuvos TSR rajonuotos žemės ūkio
kultūrų veisles. Vilnius, Valstybinė politinės ir mokslinės
literatūros leidykla, 1961. 55 p. (MIRA 15:2)
(Lithuania--Field crops--Varieties)

VITKAUSKAS, J., red.; BARANAUSKAS, B., red.; SERKSNYS, J., red.;
ZVIRENAS, A., red.; PETRUSEVICIUS, V., red.; ADOMAVICIUS, B.,
red.; KILAS, M., red.; SARKA, S., tekhn. red.

[Scientific and technical information] Mokslinė - techninė
informacija. Vilnius, Valstybinė politinės ir mokslinės
literatūros leidykla, 1961. 40 p. (MIRA 16:5)

1. Lietuvos žemės ūkio mechanizacijos ir elektrifikacijos
mokslinio tyrimo institutas.
(Lithuania--Agricultural machinery)

VASINAUSKAS, P.; KAMINSKAS, A., red.; KILAS, M., red.; BUTKUS, A., red.

[Science in the intensification of agriculture; transactions of the conference of January 1965 in Dotnuva]
Mokslas - zemdirbystei intensyvinti; 1965 m. sausio mėnesi Dotnuvoje įvykusio pasitarimo medžiaga. Sudarytojas P. Vasinauskas. Vilnius, Leidykla "Mintis," 1965. 194 p.
[In Lithuanian] (MIRA 18:7)

1. Dotnuva. Lietuvos Žemdirbystės mokslinio tyrimo institutas.

PIPIRAS, Yuozas, dots., kand. veter. nauk; AIZINBUDAS, Leizeris;
RUSINAS, Simas; GRUBLIAUSKAS, Liudvikas; KILAS, M., red.

[Principles of veterinary medicine] Veterinarijos pagrindai.
Vilnius, Mintis, 1965. 287 p. [In Lithuanian]

(MIRA 18:7)

KIIASHCV, A. P.

Thoracic duct - diseases

Surgical procedure in cases of injury of the cervical part of the thoracic duct;
and experimental investigation., Khirurgiia, no. 12, 1951.

Monthly List of Russian Accessions, Library of Congress, March 1952. UNCLASSIFIED.

KILASONIYA, P.F.

Petrography of ancient crystalline rocks of the upper Svanetia.
Trudy Tbil. GU 90:5-27 '63. (MIRA 17:4)

KILASCHNIYA, I. F.

Petrology - Georgia (Transcaucasia)

Interrelation of granitoid rocks of the Dzirula Massif. Dokl. AN SSSR, 22, No. 4, 1952.
Tbilisakiy Gosudarstvennyy Universitet im. I. V. Stalina red. 3 Nov. 1951

Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified

KILASONIYA

Petrography of Certain Magmatic Rocks of the Marneul'skiy and Bolnisskiy Rayons

Among the granitic regions the author distinguishes according to composition normal granites and more basic hybrid varieties, the formation of which is connected with the dissolving of a certain quantity of enclosing rocks of the "porphyritic Bayos Strata"; in particular, biotite quartz diorite of the Bardadzorsk massif, composed of 2.7% calcium feldspar, 17% quartz, 60% plagioclase, 16% biotite, 3.5% ore minerals, and 1.4% apatite. (RZhGeol, No. 5, 1955) Tr. Tbilis. un-ta, No. 52, 1954, 177-196

SO: Sum. No. 744, 8 Dec 55 - Supplementary Survey of Soviet Scientific Abstracts (17)

KILASONIYA, P.F.

Genesis and age relationship of the metamorphic rocks of the
Dzirula Crystalline Massif. Izv. AN SSSR. Ser. geol. 30
no.3:58-72 Mr '65. (MIRA 18:3)

1. Tbilisskiy gosudarstvennyy universitet, Tbilisi.

KILB, GY.

Problems of raw paprika for spice. p. 59. Vol. 10, No. 2, Feb. 1956,
Budapest, Hungary.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4, April 1957

KILB, Gyula, dr.

Observation investigation of original American and Hungarian tomato species. Konzerv paprika no.4:131-134 JI-Ag '62.

1. Konzerv- es Paprikaipari Kutato Intezet.

KILB, Gyula, dr.; KOVACS, Istvan

Observation examination of foreign cucumber varieties. Konzerv paprika no.5:168-171 S-0 '62.

1. Konzerv- es Paprikaipari Kutatointezet (for Kilb). 2. Kecskemeti Konzervgyar (for Kovacs).

KILB, Gyula, dr.

Cucumber processing line at the Nagykoros Canned Factory.
Konzerv paprika no.5:180-181 S-0 '62.

KILB, Gyula, dr.

Industrial evaluation of improved paprika varieties on the ground of observing the 1959-1961 productions. Konzerv paprika no.1:25-30 Ja-F '63.

1. Konzerv- es Paprikaipari Kutato Intezet.

GOSEMOV, N.V., Arch.; KILBARKO, P. I., Arch.

Thin-type insulating varnish coating on glass substrate.
coating. Elektrotehnika 16 no. 4/1971 p. 105. (1971)

KIL'BERG, Kh.I.

KRACHKOVSKIY, Ignat'iy Yulianovich, akademik; GORDLEVSKIY, V.A., akademik, red. [deceased]; TSERETELI, G.V., red.; BERTEL'S, Ye.M., red.; KRACHKOVSKAYA, V.A., doktor istoricheskikh nauk, prof., red.; ZAKHODER, B.N., doktor istoricheskikh nauk, prof., red.; BELYAYEV, V.I., kand. filologicheskikh nauk, red.; KIL'BERG, Kh.I., kand. istoricheskikh nauk, red.; KONAKOV, A.P., red. izd-va; BLEYKH, E.Yu., tekhn. red.

[Selected works] Izbrannye sochinenia. Moskva, Izd-vo Akad. nauk SSSR. Vol. 4. 1957. 919 p. (MIRA 11:2)

1. Chlen-korrespondent AN SSSR (for Tsereteli, Bertel's) (Geography, Medieval)

S/044/62/000/011/007/064
A060/A000

AUTHOR: Kil'berg, Ye.M.

TITLE: Strong summability of double Fourier series

PERIODICAL: Referativnyy zhurnal, Matematika, no. 11, 1962, 16 - 17, abstract
11B79 (Nauchn. zap. Dnepropetr. un-ta, 1961, v. 55, 119 - 121)

TEXT: The following theorem is proven: If a function $f(x, y)$, periodic with respect to both of its arguments, is integrable with p -th power ($p > 1$) in the square $Q[-\pi, \pi; -\pi, \pi]$ and at some point (x, y) of that square the conditions

$$\int_0^u \int_0^v |\varphi(t, \tau) - 4S| dt d\tau = o(u, v), \quad u, v \rightarrow 0;$$

$$\int_0^u \int_0^v |\varphi(t, \tau) - 4S|^p dt d\tau = o(u^{p+1}), \quad v \text{ fixed}, \quad u \rightarrow 0;$$

Card 1/2

Strong summability of double Fourier series

S/044/62/000/011/007/064
A060/A000

$$\int_0^u \int_0^v |\varphi(t, \tau) - 4S| P dt d\tau = O(v^{p+1}), \quad u \text{ fixed, } v \rightarrow 0,$$

where $\varphi(u, v) = f(x+u, y+v) + f(x+u, y-v) + f(x-u, y+v) + f(x-u, y-v)$ are satisfied, then for partial sums $S_{\nu\mu}(x, y)$ of the double Fourier series with $k > 0$, there holds the relationship ✓

$$\sum_{\nu=0}^m \sum_{\mu=0}^n |S_{\nu\mu}(x, y) - S| k = O(mn),$$

provided m and n tend to infinity in such a way that for some $\lambda > 1$ $\frac{1}{\lambda} \leq \frac{m}{n} \leq \lambda$.
The paper contains misprints, making its perusal difficult.

F.I. Kharshiladze

[Abstracter's note: Complete translation]

Card 2/2

S/044/62/000/011/008/064
A060/A000

AUTHOR: Kil'berg, Ye.M.

TITLE: On a method of strong summation of a differentiated double Fourier series

PERIODICAL: Referativnyy zhurnal, Matematika, no. 11, 1962, 17, abstract 11B80
(Nauchn. zap. Dnepropetr. un-t, 1961, v. 55, 155 - 159)

TEXT: We are using the notation of the preceding abstract. Say $f(x, y)$ is integrable in the square Q and has the partial derivatives $f'_x(x, y)$, $f'_y(x, y)$ and $f''_{xy}(x, y)$; $f'_x(x, y)$ and $f'_y(x, y)$ are continuous, of bounded variation with respect to x, y , respectively, on the interval $[-\pi, \pi]$; at almost all points (x, y) of the square Q

$$\int_0^u \int_0^v |\varphi''_{t\tau}(t, \tau) - 4f''_{xy}(x, y)| dt d\tau = o \left[\frac{u}{(\lg \frac{1}{u})^{1+\delta}} - \frac{v}{(\lg \frac{1}{v})^{1+\delta}} \right], \quad \epsilon > 0,$$

$u, v \rightarrow 0.$

Card 1/2

On a method of strong summation of a

S/044/62/000/011/003/064
A060/A000

Then, almost everywhere in that square

$$\sum_{\nu=0}^m \sum_{\mu=0}^n \left| \frac{\partial^2}{\partial x \partial y} S_{\nu\mu}(x, y) - f''_{xy}(x, y) \right|^k = O(m, n).$$

F.I. Kharshiladze

[Abstracter's note: Complete translation]

Card 2/2

KILBRIK, P. S., YANUTSEVICH, F. P.

Electric Power-Plants

Operating efficiency of the power train V-5000 burning ordinary coal. Za ekon. top., 9, No. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, March 1952. Unclassified.

KILBURSZKY, B.; FOLDVARI-VOGL, M.

A quick differential thermic apparatus for analysis. p. 19. (Magyar
Kemikusok Lapja, Vol. 12, No. 1, Jan 1957, Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

KIL'CHEVS'KA, G.A.

Characteristics of microflora in the Kiev water system.
Nauk.zap.Kiev.un. 8 no.3:41-44 '49.

(MLRA 9:10)

(Kiev--Water--Bacteriology)

RUBENCHIK, L.I.; CHERNOBYL'SKAYA, M.N.; KIL'CHEVSKAYA, A.A.

Microbiological characteristics of some soils in bottom lands of the
Irpen' (Ukrainian Polesya). Nauk.zap.Kiev.un.12 no.7:21-26 '53.
(Irpen' Valley--Soil micro-organisms) (MLRA 9:10)

RUBENCHIK, L.I.; CHERNOBYL'SKAYA, M.N.; KIL'CHEVSKAYA, A.A.

Effect of granosan on *Azotobacter chroococcum*. Mikrobiol.zhur. 16
no.4:19-25 '54. (MLRA 10:1)

1. Z Kiivs'kogo derzhavnogo universitetu imeni T.G.Shevchenka.
(GRANOSAN) (AZOTOBACTER)

AUTHORS: Rubenchik, L. I., Chernobyl'skaya, M. N., 20-114-6-49/54
Kil'chevskaya, A. A., Filanovskaya, A. N.

TITLE: The Influence Exerted by the Volatile Secretions of
Actinomycetes Upon Bacteria (Vliyanie letuchikh vydeleniy
aktinomitssetov na bakterii).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 114, Nr 6, pp. 1315-1316 (USSR)

ABSTRACT: Antibacterial substances were, among others, determined in the
volatile secretions of some fungi of the species Trichoderma
(reference 4). The authors studied 4 species of Actinomycetes.
As test objects they used 4 species of bacteria in which the
influence of the above-mentioned fungi was determined. The
fungi were cultivated in Petri dishes, the bacteria in the
covers of these dishes. A layer of air of 12-14 mm thickness
thus separated both types in such a "two-storey" culture.
Therefore only the volatile secretions of the fungi could act
upon the bacteria. In the control dishes the lower "storey"
was not inhabited. The culture lasted 72 hours at 28^o. The
results are given in table 1. A stimulating influence was
exerted by: Actinomyces griseus subsp. variabilis and Act.
coelicolor upon Bac. subtilis and Bac. mesentericus; Act.
globisporus var. diastaticus upon Bact. coli, Bac. subtilis

Card 1/3

KIL'CHIVSKAYA E. (Aul Balkhar, Dagestanskaya ASSR).

Pottery from the village of Balkhar. Prom.koop. no.6:16 Je '57.
(MIRA 10:7)

(Balkhar--Pottery)

KIL'CHEVSKAYA, E., iskusstoved

A talented goldsmith. Prom.koop. 13 no.5:22 My '59.
(MIRA 12'9)

(Daghestan--Goldsmithing)

KILCHEVSKAYA, M.A., SILYAYEVA, M.F., ZHIGALKOVICH, A.S., LEONOV, V.A.,
MEREZHINSKY, V.M., LASTOVSKAYA, T.C. (USSR)

"Metabolic Processes in Relation to Suppression of Thyroid Gland
Function in Animals of Various Ages and at Different Times of the
Year."

Report presented at the 5th Int'l Biochemistry Congress,
Moscow, 10-16 Aug. 1961

LEVIN, I.A., kand. tekhn. nauk; KIL'CHEVSKAYA, T.Ye.

Corrosion of metals in fatty acids. Khim. prom. no.6:419-424
Je '63. (MIRA 16:8)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy
institut neftyanogo mashinostroyeniya.
(Metals--Corrosion) (Acids, Fatty)

SHANINA, T.M.; TIMOFEYEV, V.I.; NEGREYEV, V.F.; KIL'CHEVSKAYA, T.Ye.;
GADZHIYEVA, K.G.

Corrosion of welded joints in petroleum industry's offshore
structures. Trudy Gipromornefti no.1:57-69 '54. (MLRA 9:12)
(Structural frames--Welding)
(Corrosion and anticorrosives)

IPAT'YEV, A.N.; BOGDANOVA, Yu.G.; KIL'CHEVSKAYA, Yu.F.; NIKITINA, I.V.;
POLYBESOVA, Ye.I.; TSENILOVA, N.A.

Autumn apple varieties of Mogilev and Gomel' provinces in White Russia.
Poty. issl. Bol. otd. VRO no 6:235-242 1954. (MIRA 1897)

AVIROM, S., kand.tekhn.nauk; KIL'CHEVSKAYA, Z., starshiy nauchnyy sotrudnik

They make good carpets. Mest.prom.i khud.promys. 3 no.3:28-30
Mr '62. (MIRA 15:3)

1. Nauchno-issledovatel'skiy institut khudozhestvennoy promyshlennosti
(for Kil'chevskaya).

(Carpets)

KIL'CHEVSKIY, A. I., (Cand-Agr-Sci)

Dissertation: "A System of Fertilization in Grain-Beet-Grass Crop
Rotation in Kirgiz SSR." Dr Agr Sci, Soil Inst, Acad Sci USSR,
26 May 54. Vechernyaya Moskva, Moscow, 17 May 54.

SO: SUM 284, 26 Nov 1954

KIL'CHEVSKIY, A.L.; KORNEVA, N.G.

[Fertilizers are an important means of increasing crop yields]
Udobrenia - moshchnyi rezerv povysheniia urozhainosti. Frunze,
Kirgizskoe gos. izd-vo, 1955. 29 p. (MIRA 10:2)
(Fertilizers and manures)

KIL'CHEVSKIY, Afanasiy Leont'yevich, doktor sel'skokhoz.nauk, prof.;
KUZNETSOV, Nikolay Ivanovich, kand.sel'skokhoz.nauk;
USTYUGOV, P.G., red.; BEYSHENOV, A., tekhn.red.

[Corn cultivation in Kirghizistan] Vozdelyvanie kukuruzy
v Kirgizii. Frunze, Kirgizskoe gos.izd-vo, 1961. 77 p.
(MIRA 15:5)

(Kirghizistan—Corn (Maize))

KIL'CHEVSKIY, A.Z.

Measurement of fluid viscosity with throttle viscosimeters.
Mash. i neft. obor. no.9:39-40 '63. (MIRA 17:2)

1. Kiyevskiy tekhnologicheskoy institut legkoy promysh-
lennosti.

KIL'CHEVSKIY, A.Z., inzh.

Flowmeters for the synchronization of industrial flows. Tekst.
prom. 23 no.7:81-84 JI '63. (MIRA 16:8)

1. Kiyevskiy tekhnologicheskii institut legkoy promyshlennosti.
(Flowmeters) (Assembly-line methods)

S/118/62/000/007/002/002
D262/D308

AUTHOR: Kil'chevskiy, B.V., Engineer

TITLE: Automation of electric smelting of copper-nickel ores

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 7, 1962, 8 - 10

TEXT: The article describes a new technique in electric smelting processes developed by the Noril'skiy combine. In this method the following processes are mechanized: handling of charges, preparation of electrodes, loading of electrode mass, replacement of the slag troughs; and the following processes are automated: loading of charges (the method of continuous loading is adopted), regulation of the electrical power of the furnace. Ventilating systems, temperature control of the furnace roof arches, walls and floors are also automated. Diagrams showing the operational circuits of the furnace loading and a schematic arrangement of the furnace are included and the method of operation described. There are 2 figures.

Card 1/1

KIL'CHEVSKIY, B.V., inzh.

Automation of electric smelting of copper-nickel ores. Mekh.i
avtom.proizv. 16 no.7:8-10 JI '62. (MIRA 15:8)
(Automation) (Noril'sk--Founding)

KIL'CHEVSKIY, G.S. (Odessa, D-57, ul. Korolenko, d.2, kv.2)

Avascular necrosis of the femur head in experimental conditions.
Ortop. travm. protez. 24 no.7:30-34 JI'63 (MIRA 17:2)

1. Iz kafedry operativnoy khirurgii s topograficheskoy anatomiyei (zav. - prof. V.I.Varlamov) i kafedry patologicheskoy anatomii (zav. - prof. Ye.A. Uspenskiy) Odesskogo meditsinskogo instituta imeni N.I.Pirogova (rektor - zasluzhennyy deyatel' nauki UkrSSR prof. I.Ya. Deyneka).

PANCHENKOV, Anatoliy Nikolayevich; KIL'CHEVSKIY, I.A., otv. red.;
FURER, P.Ya., red.

[Hydrodynamics of a submerged hydrofoil] Gidrodinamika
podvodnogo kryla. Kiev, Naukova dumka, 1965. 551 p.
(MIRA 18:4)

1. Chlen-korrespondent AN Ukr.SSR (for Kil'chevskiy).

BILOSHTAN, A.P.; BOYKO, M.F.; DOROSHENKO, Ye.P. [Doroshenko, K.P.];
DOTSENKO, P.P.; KIL'CHEVSKIY, I.A. [Kil'chevs'kyi, I.O.];
MARINICHENKO, V.G. [Marynychenko, V.H.]; RAK, L.K.;
KRIVETSKIY, I.S. [Kryvets'kyi, I.S.], red.; ROMANENKO, I.N.,
red.; TRITINCHENKO, A.P. [Trytynchenko, A.P., red. inzd-va;
VIRICH, D.V. [Viryoh, D.V.], tekhn. red.

[Russian-Ukrainian agricultural dictionary] Rosiis'ko-ukrains'-
kyi sil'skohospodars'kyi slovnyk. Ukladachi: A.P. Biloshtan
ta inshi. Kyiv, Vyd-vo AN URSR, 1963. 438 p. (MIRA 17:3)

1. Akademiia nauk URSR, Kiev. Instytut movoznavstva. 2. Chlen
korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk
imeni V.I.Lenina (for Romaenko).

BILOSHTAN, A.P.; BOYKO, M.F.[Boiko, M.F.], kan.fil.nauk; DOROSHENKO, Ye.P.;
DOTSENKO, P.P.; KIL'CHEVSKIY, I.A.[Kil'chevs'kyi, I.O.];
MARINICHENKO, V.G.[Marynychenko, V.H.]; RAK, L.K.; KRIVETSKIY,
I.S.[Kryvets'kyi, I.S.], red.; ROMANENKO, I.N., red.;
TRITINCHENKO, A.P.[Trytynchenko, A.P.], red.izd-va; VIRICH,
D.V.[Virych, D.V.], tekhn. red.

[Russian-Ukrainian agricultural dictionary] Rossiis'ko-
ukrans'kyi sil's'kohospodars'kyi slovnyk. Ukladachi: A.P.
Biloshtan ta inshi. Kyiv, Vydav, Vydvo AN URSS, 1963. 438 p.
(MIRA 17:2)

1. Akademiya nauk URSS, Kiev. Instytut movoznavstva. 2. Chlen-
korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk
im. V.I.Lenina (for Romanenko).

KIL'CHEVSKIY, M.O.; KOVALENKO, A.D.; SIDLYAR, M.M.

Research in the Department of Mechanics, the Department of the
Theory of Elasticity, and the Department of Aerohydromechanics
and Heat Exchange. Nauk. zap. Kyiv. un. 16 no.16:29-41 '57.

(MIRA 13:3)

(Kiev--Mechanics--Study and teaching)

SHELUD'KO, I.M., kand. tekhn. nauk, dots.; GNYP, P.I. [Hnyp, P.I.],
kand. tekhn. nauk, dots.; MARINICHENKO, V.G. [Marynychenko, V.H.],
kand. filol. nauk; SHVETS, I.T., akademik, otv. red.;
KIL'CHEVSKIY, I.O. [Kil'chevs'kyi, I.O.], kand. filol. nauk, red.-
leksikograf; STETSENKO, V.D., red. izd-va; ROZENTSVEYČ, IE.N.
[Rozentsveih, IE.N.], tekhn. red.

[Russian-Ukrainian dictionary on heat and gas engineering.
32, 000 terms] Rosiis'ko-ukrains'kyi slovnyk z teplotekhniky ta
gazotekhniky. 32 000 terminiv. Vidpovidal'nyi red. I.T.Shvets'.
Kyiv, Vyd-vo Akad. nauk URSR, 1962. 308 p. (MIRA 16:2)

1. Akademiya nauk Ukr. SSSR (for Shvets').
(Russian language--Dictionaries--Ukrainian)
(Heat engineering--Dictionaries)
(Gas engineering--Dictionaries)

KIL'CHEVSKAYA, M.A.

Cholesterol metabolism in the liver and lungs following ionizing irradiation under hypothyreosis conditions. Dokl. AN BSSR 8 no.10: 675-676 0 '64. (MIRA 18:3)

1. Minskiy gosudarstvennyy meditsinskiy institut.

KIL'CHEVSKIY, M.O. [Kil'chevs'kyi, M.O.]

Vibration of rectangular plates. Nauk. zap. Kyiv. un. 16 no.16:79-92
'57. (MIRA 13:3)

(Elastic plates and shells--Vibration)

L 43782-66 E.T(1)/ST(m)/T DJ

ACC NR: AP6032351

SOURCE CODE: UR/0021/66/000/005/0593/0597

AUTHOR: Kil'chevs'kyi, M. O. (Corresponding member AN UkrSSR); Kostyuk, E. M. 42

ORG: Institute of Mechanics, AN UkrSSR (Instytut mekhaniky AN UkrSSR) 5

TITLE: Dynamic interaction in gear transmissions due to deformation of teeth 7

SOURCE: AN UkrSSR. Dopovidi, no. 5, 1966, 593-597¹

TOPIC TAGS: mechanical power transmission device, transmission gear, material deformation

ABSTRACT: Local dynamic effects are examined in gear transmissions under Timoshenko-Hertz conditions. Errors due to poor workmanship, friction, and contact slip are neglected, as are the elastic forces on the gear shafts. Thus, the study is restricted to the dynamic torsion forces on the wheel shafts and the deformation of the teeth. Timoshenko's theory of collisions is used to formulate the relations describing the dynamic interactions due to tooth deformation. The results, obtained for spur gears, can be directly extended to bevel gears. Orig. art. has: 9 formulas. [JPRS: 36,712]

SUB CODE: 13, 20 / SUBM DATE: 21Jun65 / ORIG REF: 009

15
Card 1/1

09/9 2005

10.0160

S/021/62/000/007/005/008
I006/I206

AUTHOR: Kil'chevs'kyi, M.O., Corresponding Member AS
UkrSSR

TITLE: On equivalent linearization of non-linear equations
of the theory of elasticity and application of equi-
valent linearization to problems in theory of stabi-
lity of shells

PERIODICAL: Akademiya nauk Ukrayns'koy RSR, *Dopovidy*, no. 7, 1962, 875-879

TEXT: The application of one of the versions of the method
of equivalent linearization to linear approximation of the compo-
nents of finite deformation tensor of an elastic medium is dis-
cussed. The construction of an equivalent medium deforming linear-
ly and the application of this construction to the special problem

Card 1/2

S/021/62/000/007/005/008
I006/I206

On equivalent linearization...

of static stability of a cylindrical shell are demonstrated.

ASSOCIATION: Institut mekhaniki AN URSR (Institute for
Mechanics AS UkrSSR)

SUBMITTED: February 17, 1962

√B

Card 2/2

KIL'CHEVSKIY, M. O.

S/198/61/007/003/001/013
D264/D303

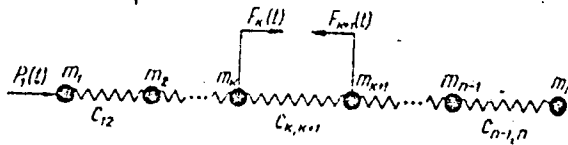
10 6300

AUTHORS: Kil'chevs'kyy, M.O., Konstantynov, A.Kh., and
Protsenko, O.P. (Kyyiv)

TITLE: On the theory of longitudinal vibrations of a system of
material points connected by springs

PERIODICAL: Prykladna mekhanika, v. 7, no. 3, 1961, 233 - 238

TEXT: The article considers a material system under the action of
non-periodic forces, consisting of masses m_i ($i = 1, 2, \dots, n$) joi-
ned by springs whose constants are $c_{i,i+1}$ ($i = 1, 2, \dots, n-1$).



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On the theory of ...

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From an investigation of the longitudinal vibrations of such a system in order to find the frequency a high-order determinant is obtained. The article proposes a method of solving the resulting equations. The authors consider the action of a non-periodic force $P_1(t)$ applied to the mass m_1 . The system is considered in two parts:

The system of masses whose indices are $< k$, $k+1$, and those whose indices are $\geq k+1$, $k+2$. The action of the spring between m_k and m_{k+1} is replaced by elastic forces which must be determined. The generalized co-ordinates are the displacements of the masses of the system. Considering the motion for each system separately, the equations of motion for the system m_j ($j = 1, 2, \dots, k$) are given and solved. From the known coordinates of the center of inertia of the system, and by substitution the equation of motion may be written

$$mx_c = \sum_{i=1}^k m_i x_i = \sum_{i=1}^{k-1} C_i \cos \omega_i t \sum_{l=1}^k m_l \Delta_l(\omega_i^2) + \quad (11)$$

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D264/D303

$$+ \sum_{i=1}^{k-1} D_i \sin \omega_i t \sum_{l=1}^k m_l \Delta_l(\omega_i^2) + (A + Bt) m, \quad (11)$$

where $m = \sum_{i=1}^k m_i$. It is supposed that at a given instant of time the

first and last mass of the system experience unit impulses. Then the initial expressions are

$$x_{j0}^{(2)} = 0 \quad (j = 1, 2, \dots, k); \quad \dot{x}_{j0}^{(2)} = 0 \quad (j = 2, 3, \dots, k-1); \quad (12)$$

$$\dot{x}_{10}^{(2)} = \frac{1}{m_1}; \quad \dot{x}_{k0}^{(2)} = \frac{1}{m_k}.$$

When the system experiences forces $P_1(t)$ and $F_k(t)$, the displacement of the points of the system may be written

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$$\begin{aligned}
 x_j^{(2)} = & \sum_{i=1}^{k-1} \frac{\Delta_i(\omega_i^2)}{\omega_i \sum_{\alpha=1}^k m_\alpha \Delta_\alpha^2(\omega_i^2)} \left[\Delta_i(\omega_i^2) \int_0^t P_1(t_1) \sin \omega_i(t-t_1) dt_1 + \right. \\
 & \left. + \Delta_k(\omega_i^2) \int_0^t F_k(t_1) \sin \omega_i(t-t_1) dt_1 \right] + \frac{1}{m_1} \int_0^t P_1(t_1)(t-t_1) dt_1 + \\
 & + \frac{1}{m_k} \int_0^t F_k(t_1)(t-t_1) dt_1. \tag{13}
 \end{aligned}$$

The general solution is of the form $x_j = x_j^{(1)} + x_j^{(2)}$ ($j = 1, 2, \dots, k$). The equation of frequency of the original system has one zero solution. Using the proposed method, as many zero solutions

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D264/D303

On the theory of ...

are obtained as the number of parts, into which the system is divided, [Abstractor's note: In the above case two]. There is no inconsistency here, since there is still one non-zero solution which has not been evaluated and which enters the analytical expression of the elastic force $F_k(t)$. Insofar as $F_k(t)$ is a continuous function possessing all derivatives, it may be written as a Taylor series for each interval. By this method the unknown function is obtained in the following form:

$$\begin{aligned}
 F_k\left(\frac{p-j}{p}t\right) &= \Phi_{k,k+1}\left(\frac{p-j}{p}t\right) + \\
 + c_{k,k+1} \sum_{i=0}^{p-j-1} &\left[\sum_{\sigma=k+1}^{n-1} \frac{\Delta_{k+1}^2(\omega_\sigma^2)}{\sum_{\alpha=k+1}^n m_\alpha \Delta_\alpha^2(\omega_\sigma^2)} \left[F_k\left(\frac{i}{p}t\right) \left(\cos \frac{p-j-i}{p} \omega_\sigma t - \right. \right. \right. \\
 &\left. \left. \left. - \cos \frac{p-j-i-1}{p} \omega_\sigma t \right) + F_k'\left(\frac{i}{p}t\right) \left(\frac{1}{\omega_\sigma} \sin \frac{p-j-i}{p} \omega_\sigma t - \right. \right. \right. \\
 &\left. \left. \left. - \frac{1}{\omega_\sigma} \cos \frac{p-j-i-1}{p} \omega_\sigma t \right) \right] \right] \quad (21)
 \end{aligned}$$

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On the theory of ...

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D264/D303

X

$$\begin{aligned}
 & -\frac{1}{\omega_\sigma} \sin \frac{p-j-i-1}{p} \omega_\sigma t + \frac{p-j-i-1}{p} t \cos \frac{p-j-i-1}{p} \omega_\sigma t - \\
 & \quad - \frac{p-j-i}{p} t \cos \frac{p-j-i}{p} \omega_\sigma t \Big] + \dots \\
 & + \sum_{\sigma=1}^{k-1} \frac{\Delta_k^2(\omega_\sigma^2)}{\omega_\sigma^2 \sum_{\alpha=1}^k m_\alpha \Delta_\alpha^2(\omega_\sigma^2)} \left[F_k \left(\frac{t}{p} \right) \left(\cos \frac{p-j-i}{p} \omega_\sigma t - \right. \right. \\
 & \quad \left. \left. - \cos \frac{p-j-i-1}{p} \omega_\sigma t \right) + F'_k \left(\frac{t}{p} \right) \left(\frac{1}{\omega_\sigma} \sin \frac{p-j-i}{p} \omega_\sigma t - \right. \right. \\
 & \quad \left. \left. - \frac{1}{\omega_\sigma} \sin \frac{p-j-i-1}{p} \omega_\sigma t + \frac{p-j-i-1}{p} t \cos \frac{p-j-i-1}{p} \omega_\sigma t - \right. \right. \\
 & \quad \left. \left. - \frac{p-j-i}{p} t \cos \frac{p-j-i}{p} \omega_\sigma t \right) \right] + \left(\frac{1}{m_{k+1}} + \right.
 \end{aligned} \tag{21}$$

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On the theory of ...

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S/198/61/007/003/001/013
D264/D303

$$\begin{aligned}
 & + \frac{1}{m_k} \left[\frac{(2i-2p+1)t^2}{2p^2} F_k \left(\frac{i}{p} t \right) + \right. \\
 & \left. + \frac{3p(2i+1) - 2(3i^2 + 3i + 1)}{6p^3} t^3 F_k \left(\frac{i}{p} t \right) \right]; \quad (21)
 \end{aligned}$$

where $F_k(0) = \Phi_{k,k+1}(0)$. The author states that this method is sufficiently effective for investigating transient processes which last for a short time interval. In this case the appearance of secular terms in the solution does not cause any difficulty. These terms may be avoided if the formulae of mechanical quadratures are used to solve the integral equation. If the system consists of a large quantity of masses, it can be broken down into several systems so that the problem becomes one of solving a system of integral equations. There are 1 figure and 2 Soviet-bloc references.

Card 7/8

APPROVED FOR RELEASE: 06/13/2000

25106
CIA-RDP86-00513R000722520011-1"

On the theory of ...

S/198/61/007/003/001/013
D264/D303

ASSOCIATION: Instytut mekhaniky AN URSR (Institute of Mechanics,
AS UkrSSR)

SUBMITTED: June 15, 1960

Card 8/8

L 14433-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k)/EWA(h)/ETC(m)-6 IJP(c) WW/EM
ACC NR: AP6002644 SOURCE CODE: UR/0021/65/000/011/1438/1443

AUTHOR: Kil'chevs'kyv, M. O. -- Kil'chevskiy, N. A. (Corresponding member AN UkrSSR);
Komisarova, H. L. -- Komisarova, G. L.; Martynenko, V. S.

ORG: Institute of Mechanics, AN UkrSSR (Instytut mekhaniky AN URSR)

TITLE: Nonstationary motion of a viscous liquid in a thin elastic cylindrical tube

SOURCE: AN UkrRSR. Dopovidl, no. 11, 1965, 1438-1443

TOPIC TAGS: hydrodynamics, viscous flow, unsteady flow

ABSTRACT: The authors investigated theoretically the nonstationary motion of viscous incompressible liquids through deformable cylindrical tubes with the law of motion prescribed at the end cross sections of the tube. Tubes under consideration have large critical Reynolds numbers and the wall thickness-to-diameter ratio of the tube is small. It is assumed that at each point under consideration the velocity of the liquid is parallel to the axis of the tube. The solution is in the form of an approximate expression through special kinds of polynomials the coefficients of which are found by means of the least square method. Orig. art. has: 35 formulas.

SUB CODE: 20 / SUBM DATE: 12Feb65 / ORIG REF: 001
Card 1/1 BVR

KIL'CHEVSKIY, N. A.

Nekotoryye metody integrirovaniya uravneniy ravnovesiya uprugikh obolochek.
Prikl. Matem. 1 mekh., 4:2 (1940), 43-58.

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

KALITCHEVSKIY, N.

Kalitchevskiy, N. Les méthodes approchées pour déterminer les déplacements dans les enveloppes cylindriques.
 Acad. Nauk Ukrain. RSR, Zhurnal Prikl. Anal. Mat. 1944, no. 1, 97-110 (1947). (Ukrainian, Russian and French summaries.)

The author shows a method of reducing the problem of elastic deformations of cylindrical shells to the solution of a system of ordinary equations by applying the Betti theorem. In his previous publications on the subject the author used the same method, but in this one he introduces an auxiliary system of differential equations. He uses a special coordinate system through the middle surface of the shell, which allows him to establish a one-to-one correspondence between the points of the plate and the points of the shell. Using the Betti theorem, the solution of the elastic equilibrium of the shell consists of 24 scalar functions, the solution of the elastic equilibrium of the plate and an expression which depends on the curvature of the shell. The integral equations of the plate at free boundaries, the integro-differential equations can be solved approximately by iteration, assuming that the curvature of the shell is sufficiently small.

V. Lutz (Lexington, Ky.)

Source: Mathematical Reviews,

Vol. 12, No. 5

^{11.6.}
KIL'CHEVS'KIY, M.O., professor.

Distribution of stresses and deformations in wire ropes. Nauk.zap.
Kiev.un. 7 no.4:101-133 '48. (MLRA 10:5)
(Wire rope) (Strains and stresses)

KIL'CHEVSKIY, M. A.

35172. O Raspredelenii Napryazheniy I Deformatsiy Pri Kontaktnom Sshatii Dvukh Uprugikh Krugovykh Tsilindrov, Kasayushchikhsya Vdol' Obrazuyushchikh. V SB:50 Let Kievsk. Politekhn. In-Ta. Kiev, 1948, s.543-605 (7555-73)--- Bibliogr:5 Nazv

SO: Letopis' Zhurnalnykh Statey, Vol. 48, Moskva, 1949

KILCHEVSKI, N. A.

Unclassified

Book:

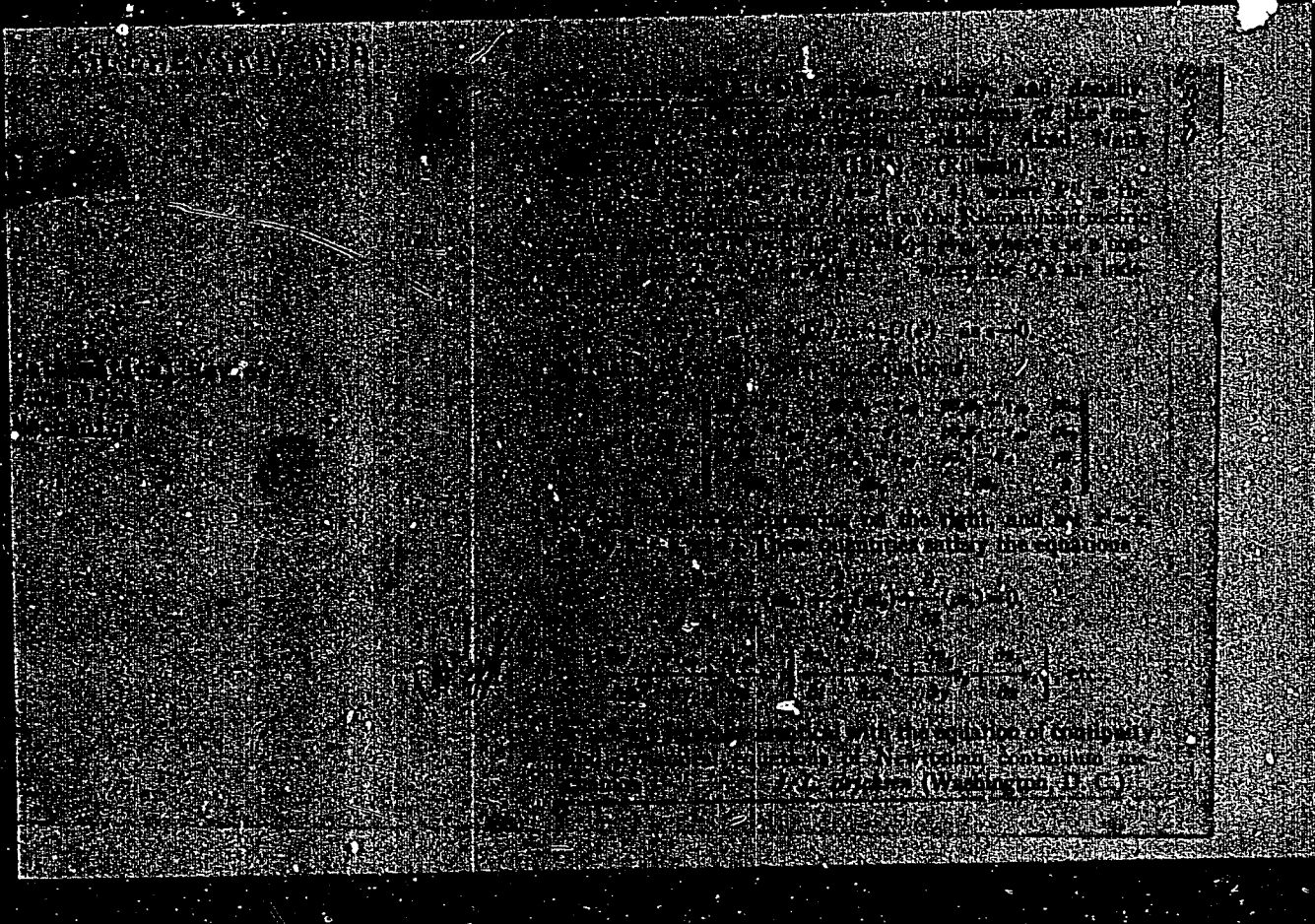
Author: Kilchevskii, N. A.

Title: Theory of Collisions of Solid Bodies

Publishing Data: 1949, Leningrad

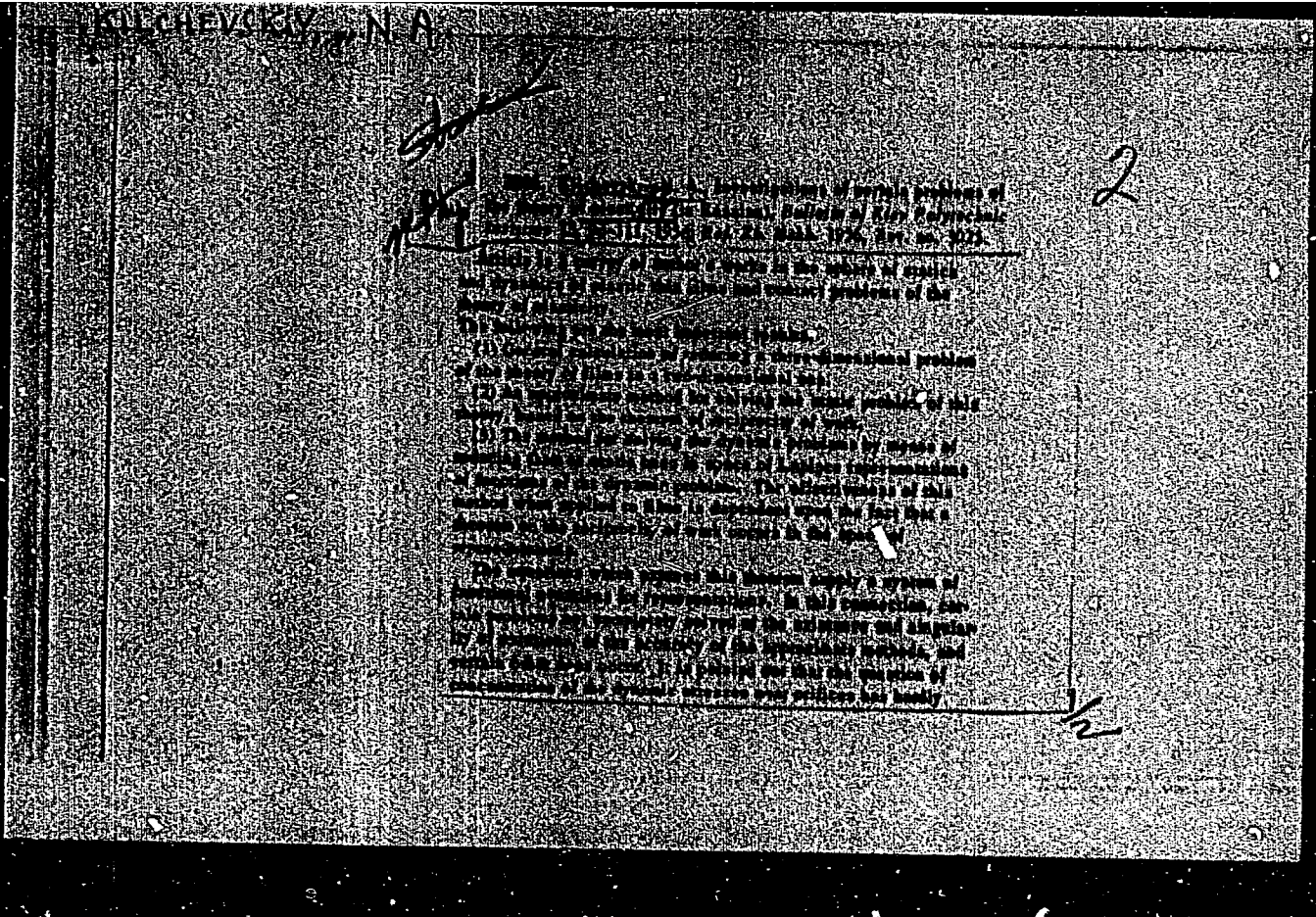
Available: L.C., QA935.K5 (1950)

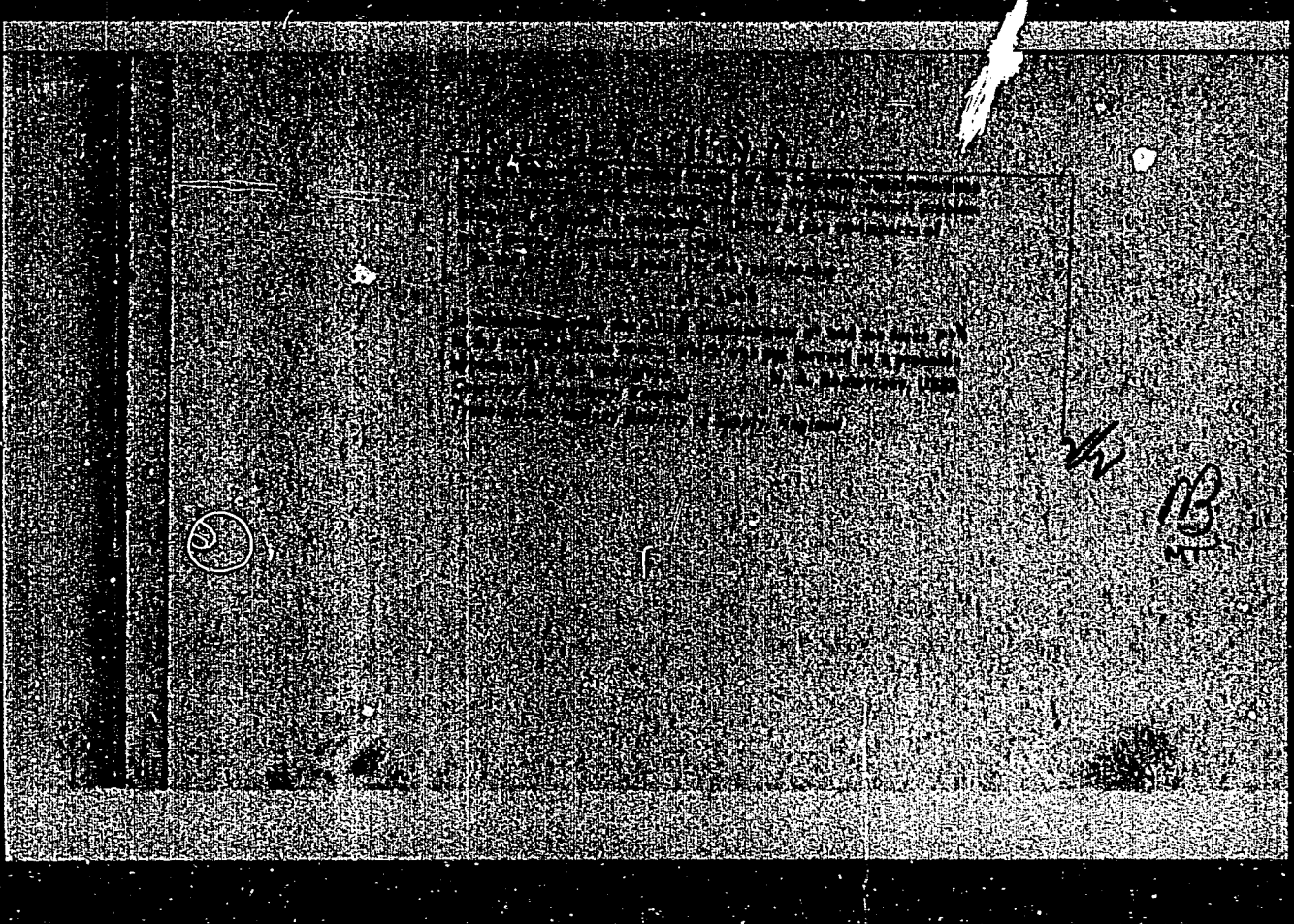
7/19/55



KIL'CHEVSKIY, N.A.

[Elements of tensor analysis and their application in mechanics]
Elementy tenzornogo ischislenia i ego prilozhenia k mekhanike.
Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1954. 167 p. (MLRA 7:9)
(Calculus of tensors) (Mechanics)





Куцак, В. А.

Куцак В. А. Approximate method of solution of certain dynamical problems of the theory of elasticity. **J-FIW**
 Akad. Nauk Ukrain. RSR, Prikl. Meh. 1 (1955), 251-267 (Ukrainian; Russian summary).
 A method of approximate solution of elastodynamic equations which permits the solution of certain cases of forced vibrations of elastic bodies is presented. The basis of the method is a transformation of the equilibrium equations of the theory of elasticity. The author uses a simple transformation of the statical dimensions; Descartes coordinates into dynamical ones. This transformation gives the relations between the static and dynamic problems of the theory of elasticity. The error of the approximate solution is discussed, as well as the conditions which the stresses on the plane boundary of the semi-space satisfy.
D. Kalkova (Belgrade).

Distr: A7/1237

237

[Handwritten signature]

KIL'CHEVSKIY, N. A.

SOV/124-58-4-4529

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 4, p 122 (USSR)

AUTHOR: Kil'chevskiy, N. A.

TITLE: On the Determination of the Dynamic Stresses Occurring During Twisting of Round Variable-section Rods (Ob opredelenii dinamicheskikh napryazheniy, vznikayushchikh pri kruchenii v kruglykh sterzhnyakh s peremennym secheniyem)

PERIODICAL: Izv. Kiyevsk. politekhn. in-ta, 1956, Vol 19, pp 252-268

ABSTRACT: The paper analyzes the distribution of dynamic stresses occurring during torsional vibrations in round variable-section rods. The problem narrows down to the solution of a certain functional equation which can be reduced to a Fredholm integral equation of second rank. Exact and simplified integral equations of the problem are presented, the author having applied de Saint-Venant's principle in setting up the simplified equations. The application of the simplified integral equations makes it possible to obtain approximate formulae which determine the distribution of the stresses and strains in round variable-section rods.

Card 1/1

1. Beams--Stresses 2. Beams--Vibration
3. Mathematics

M. M. Manukyan

KIL'CHEVSKIY, N.A.

AUTHOR: KIL'CHEVSKIY, N.A. (Kiyev) 40-5-5/20
TITLE: A Theorem on the Reciprocity of the Works and the Construction of Green's Tensor in the Theory of Small Elasto-Plastic Deformations (Teorema o vzaimnosti rabot i postroyeniye tenzora Grina v teorii malykh uprugoplasticheskikh deformatsiy).
PERIODICAL: Prikladnaya Mat. i Mekh., 1957, Vol. 21, Nr 5, pp. 634-643 (USSR)
ABSTRACT: A generalization of a well-known theorem of elasticity theory concerning the reciprocity of the works is given by which an extension to elasto-plastic media is carried out on the one hand and to the existence of two bodies on the other hand. The two bodies are assumed to be equal with respect to deformation and geometric form, however, they are assumed to have different elasto-plastic properties in their materials. The well-known theorem of the reciprocity of works is a direct consequence of Green's formula applied to the Newton potential. If the deformations are assumed to be small, the solution can be found also for elasto-plastic deformations according to the same method, whereby a series decomposition in terms of powers of a small deformation parameter is carried out. Thus a method for the approximative construction of Green's tensor for an unlimited elasto-plastic medium is given.

Card 1/2

A Theorem on the Reciprocity of the Works and the Construction of Green's Tensor in the Theory of Small Elasto-Plastic Deformations 40-5-5/20

There are no figures, no tables and 7 Slavic references. The author particularly refers to the papers of Somil'yan and A.A. Il'yushin [Ref.4] .

SUBMITTED: December 28, 1956
AVAILABLE: Library of Congress

Card 2/2

AUTHOR: Kil'chevskiy, N.A. (Kil'chevs'kyy, M.O.) 21-1-4/26
TITLE: Extremal Properties of the Solution of the Compression Contact Problem of Elastic Solids (Ekstremal'nyye svoystva resheniy zadachi o kontaktnom szhatii uprugikh tel)
PERIODICAL: Dopovidi Akademii Nauk Ukrain's'koi RSR, 1958, # 1, pp 17-20 (USSR)
ABSTRACT: On the basis of the principle of least action, the author shows that the solution of the problem of a contact interaction between elastic solids is reduced to the investigation of the conditional extremum of the integral

$$\iint_{(\omega)} f(M) p^2(t, M) dS_M$$

where $f(M)$ is a function depending on the density of the solids and the thickness of their surface molecular layers: $p(t, M)$ is the contact pressure, and (ω) is the region of compression. If the values of surface molecular layer thickness and density of the solids are constant, the solution of the contact problem is reduced to the investigation of the conditional extremum of the integral

Card 1/2

21-1-4/26

Extremal Properties of the Solution of the Compression Contact Problem of Elastic Solids

$$\iint_{(w)} p^2(t, M) dS_M$$

The article contains 1 Russian and 2 Ukrainian references.

ASSOCIATION: Kiyev Polytechnic Institute (Kyivs'kyi politekhnichnyy instytut)

PRESENTED: By Academician of the Ukrainian Academy of Sciences G.N. Savin (Ukrainian spelling: G.M.)

SUBMITTED: 13 March 1957

AVAILABLE: Library of Congress

Card 2/2 1. Mathematics-Theory

KIL'CHEVSKIY, N.A. [Kil'chevs'kyi, N.O.] (Kiev)

H. Hertz' investigations of the contact problem and some stages
of their further development [with summary in English]. Prikl.
mekh. 4 no. 2:121-129 '58. (MIRA 11:8)

1. Kiivs'kiy politekhnichniy institut.
(Elasticity)

KIL'CHEVSKIY, N.A. [Kil'chevs'kyi, N.O.] (Kiyev); TKACHUK, G.I.
[Tkachuk, H.I.] (Kiyev)

Some properties of integral equations based on the theorem of
reciprocity of work. Prykl.mekh. 5 no.2:210-212 '59.
(MIRA 12:9)

1. Kiyevskiy politekhnicheskij institut.
(Integral equations)

KIL'CHEVSKIY, N.A. (Kiyev)

Integrodifferential and integral equilibrium equations for thin
elastic shells. Prikl.mat. i mekh. 23 no.1:124-133 J_A-F '59.
(MIRA 12:2)

(Elastic plates and shells)
(Integral equations)

report presented at the 1st All-Union Congress of Theorists and Applied Mechanics, Moscow, 27 Jan - 3 Feb '60.

K. L. H. G. V. S. K. i. y, N. A.

- 130. A. A. Il'yashin (Moscow): Problems of the theory of plasticity under combined loading.
- 131. S. S. Zolotarev (Zhukovskiy): Elastic-plastic vibrations of rods of non-circular cross sections.
- 132. V. P. Salitskiy (Leningrad): The forced nonlinear flexural vibrations of a homogeneous prismatic rod and a very long rectangular plate.
- 133. M. I. Gerasimov (Moscow): On a method of solving the equations of motion for an elastic anisotropic medium in the presence of a magnetic field.
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KILCHEVSKIY, N. A. (Acad. Sci. USSR)

"Some Generalizations of the Formulation and the Methods of solution of Static and Dynamic Contact Problems, "

report presented at the 10th International Congress of Applied Mechanics, (ICSU) Stresa, Italy, 31 August - 7 Sep 1960

In the author's absence, the paper was presented by G. S. Shapiro. Hertz's contact problem is reconsidered and the distribution of the contact pressure is determined in the static case. Dynamic contact was studied also, indicating that local inertia forces may be of considerable influence.

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TITLE: Formulation and Method of Solution of the Contact Pressure Problem between Elastic Bodies Bounded by Developpable Surfaces

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1960 No 4, pp 138-141

TEXT: It is stated that the analysis of contact pressure in helical involute gear engagements, has not hitherto been based on an appropriate theory of contact pressure for bodies bounded by developpable surfaces. The formulation and a method of numerical solution for this problem suitable for electronic computer procedures are presented. It is assumed that, before deformation, the bodies make contact along a common truncated generator line. The effects of friction and lubrication are neglected. The compression of bodies is examined which have a sufficiently large general stiffness so that deformations remote from the region of pressure can be ignored in the analysis of that region. A system of equations governing contact pressure under the conditions described is recited, following A.N. Grubin (Ref 3). The equations

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