

DANEK, Jiri, inz.

Apparatus for quick determination of water content. Prum
potravin 13 no.5:265-266 My '62.

1. Statni inspekce jakosti potravinarskych vyrobku, Praha.

DANEK, Jiri, inz.

A reliable method for determining the free water content in butter.
Prum potravin 13 no.6:320-321 Je '62.

1. Statni inspekce jakosti potravinarskych vyrobku, Praha.

SCHNEIDER, Jindrich, inz.; DANEK, Jiri, inz.

Measuring the consistency of processed cheese. Prum potravin 13 no.9:
493-496 S '62.

1. Ministerstvo potravinarskeho prumyslu, Praha (for Schneider).
2. Statni inspekce jakosti potravinarskych vyrobku, Praha (for Danek).

CERNA, Eva, inz.; DANEK, Jiri, inz.

Use of the refractometric method for determining the composition of frozen cream products. Prum potravin 14 no.2:89-91 F '63.

1. Vyzkumny ustav mlekarensky, Praha (for Cerna).
2. Statni inspekce jakosti vyrobku potravinarskeho prumyslu, Praha (for Danek).

DANEK, Jiri, inz.; FORT, Josef, inz.

International standardization of the Gerber method. Prum potravin
14, no.5:269-270 My '63.

1. Statni inspekce jakosti vyrobku potravinarskeho prumyslu,
Praha (for Danek). 2. Ustredni kontrolni a zkusebni ustav
zemedelsky, Praha (for Fort).

CERNA, Eva, inz.; DANEK, Jiri, inz.

Experience with the apparatus for quick determining of water content. Prum potravin 15 no.3:240-242 Mr. 1966.

1. Research Institute of Dairy Industry, Prague, (for Cerna).
2. State Inspection of Food Product Quality, Prague (for Danek).

DANEK, Jiri, inz.

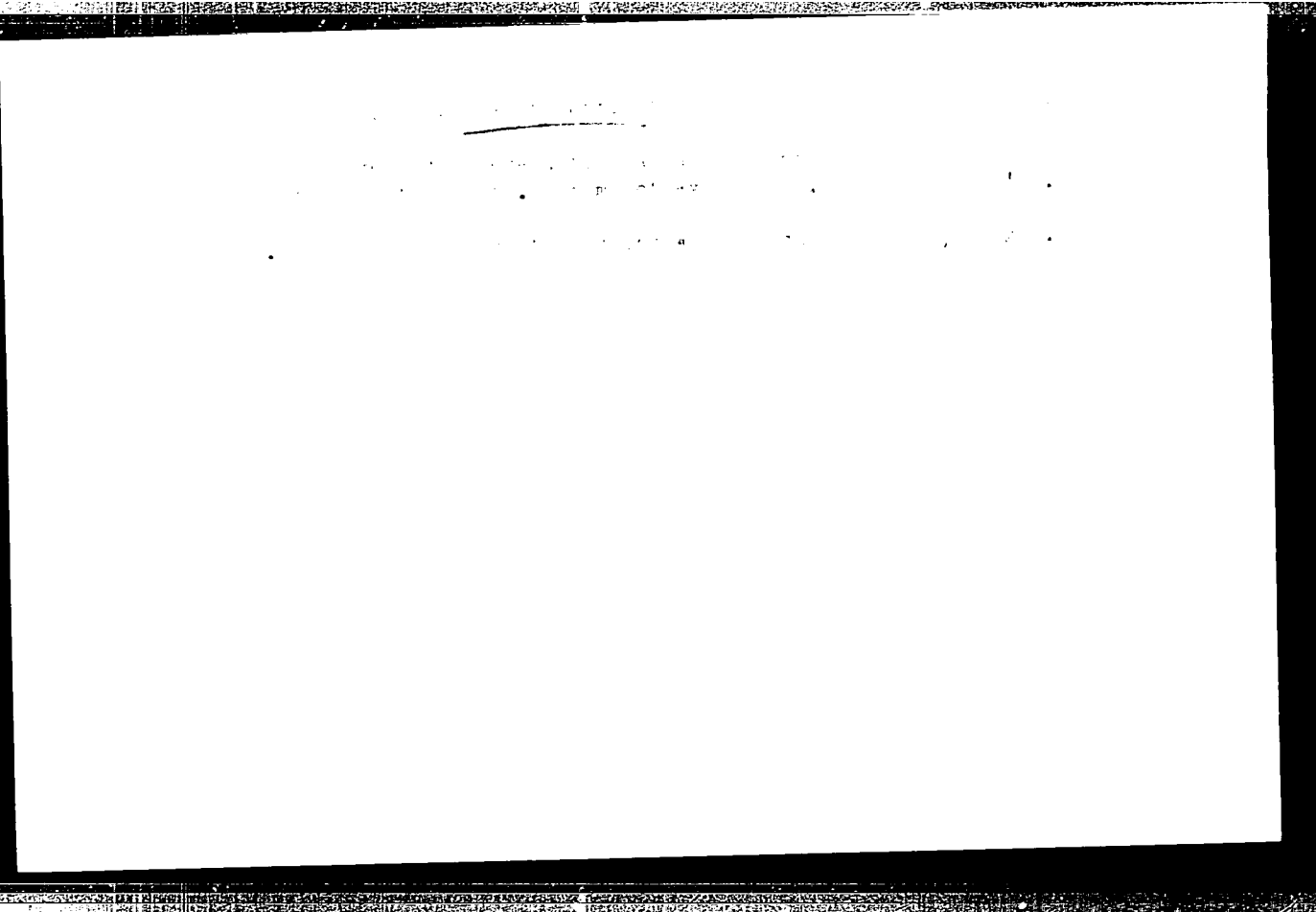
Laboratory control in the food industry, its importance and development. Prum potravin 15 no.5:205-208 My '64.

1. State Inspection of Food Product Quality, Prague.

DANFK, Jiri, cz.

Tasks of laboratories in ensuring a higher quality of food.
Prum potravin 15 no.11:52-54 N. Brn.

1. State Department of Food Industry, Institute of Food Technology, Prague.



DANEK, Josef

Report from the Secondary Industrial School of Food Technology
in Prague. Kvasny prum 9 no.8:197 Ag '63.

1. Stredni prumyslova skola potravinarske technologie, Praha.

EXCERPTA MEDICA Sec 8 Vol 12/5 Neurology May 59

2493. THE PANORAMA OF PSYCHOSOMATIC MEDICINE - Panoráma psychosomatiky - Daněk K. Červený Kostelec, Czechoslovakia - VOJ ZDRAVOTN. LISTY 1958, 27/9 (425-427)

Brief analysis of fundamentals of psychosomatic thought are based on the following elements: (1) the idea that the illness is a psychologically very important event, deeply connected in its roots as well as in its consequences with the development of the patient's personality and his view of the meaning of his own life, (2) the theory that unconscious conflicts may manifest themselves in the form of symptoms which express the conflict symbolically, (3) the physiological investigation of bodily changes due to emotions, (4) the teaching of conditioned reflex activity, (5) the supposition that the patient's own conscious behaviour (eating, drinking, smoking, sedative habits etc.) plays a major part in the aetiology of a rather great number of diseases, and (6) the observation that almost always the immediate pathogenetical influence in the development of psychosomatic disease may be subsequent to changes in the social environment of the patient, such changes often being, however, due to a former incorrect behaviour or decision of the patient himself. The indiscriminate use of the term 'psychosomatic' is criticized.

DANEK, Karel

CZECHOSLOVAKIA

MD

Not given

Prague, Prakticky Lekar, No. 13, 1964, p. 157

Contribution to article by J. Filsak, MD: "Question
of Capacity of Recreational Areas"

SECRET

SECRET, 1975.

name, Vladimir Vladimirovich, born [redacted], 1915

"[redacted] of [redacted]."

1(4); 10(3)

PHASE I BOOK EXPLOITATION

CZECH/3466

Daněk, Milan, Engineer

Aerodynamika a mechanika letu pro piloty a techniky (Aerodynamics and Mechanics of Flight for Pilots and Technicians) Prague, Naše vojsko, 1958. 289 p. (Series: Knižnice letectví, sv. 21). 3,000 copies printed.

Ed.: Karel Zelený.

PURPOSE: The book is intended for fliers and students of aviation technicians and flying schools.

COVERAGE: The author presents the theory of flight and maneuverability in a practical way, i.e., without discussing aerodynamic relations or proving the validity of aerodynamic formulas. Although preliminary knowledge of mathematics and fluid mechanics is assumed, the theories are presented in simple terms. Exercises at the end of the book can be solved without using higher mathematics. No personalities are mentioned. There are 6 references: 3 Soviet, and 3 Czech.

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CZECH/3466

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AVAILABLE: Library of Congress (TL570.D315)

Card 10/10

AC/gap
4-21-60

10 1000

26 1000 (2114 4216)

AUTHOR: Daněk, Milan, Engineer

TITLE: Through the sound barrier into space

PERIODICAL: Křídla vlasti, v. 1, no. 1, 1961

TEXT: The article deals with the problems of hypersonic flight. It presents some theoretical considerations on the aerodynamic characteristics. For hypersonic aircraft with speeds in the range of 5-10 km/h, the conversion of kinetic energy into potential energy is a serious problem during climb and descent, respectively, and it is called "energy dump" above the dense atmospheric layers. When flying at such speeds, an aircraft in this speed range will not be able to climb and will practically be in cosmic space and where it could perform a "turn" of several hundred kilometers. The aircraft will be able to fly in the upper atmosphere, the path and speed will depend on the altitude and the density of the air. Under parts of the aircraft will be destroyed by the heat of the thin atmospheric reentry. However, the aircraft will be able to control itself by special control equipment, such as special control systems.

Card 1/3

Through the sound and heat barrier ...

Page
2
D. L.

either in the front or the rear part of the fuselage with the pilot
could stabilize and control the aircraft while in flight. The aircraft
design. Furthermore, hypersonic vehicles can be designed to be
could be built, capable of absorbing the wave of the air. The aircraft
at jumps. Their initial speed would be maintained by the use of
guiding the aircraft to complete the rest of the flight. The aircraft
utilizing the tremendous initial speed. The aircraft would be
be equipped with special control systems. The aircraft would be
ballistic missiles. The aircraft would be designed to operate in
vertical manner using wings. The aircraft would be designed to be
capable of decelerating and landing. The aircraft would be designed to
requirements are in order. The aircraft would be designed to be
and flying speed would have to be maintained. The aircraft would be
before. The aircraft would be designed to be able to land.
involved. The aircraft would be designed to be able to land.
involved. The aircraft would be designed to be able to land.
involved. The aircraft would be designed to be able to land.

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D005/D100

Through the sound and heat barrier ...

If a space ship equipped only with aerodynamic braking equipment and its re-entry would pose similar problems. The re-entry of such a space ship can be effected by adequate heating of the air surfaces and parachutes. While selecting proper shapes for nose surfaces, it could be possible to convert a considerable portion of the kinetic energy into heat imparted to shock waves which are at a sufficient distance from the space ship. The amazing flights of Y. A. Gagarin and G. S. Titov demonstrated that the Soviets have successfully solved some of the most difficult problems of space flight. The rapid improvement of their space ships suggests that further successes of Soviet cosmonautics can be expected in the near future. There are 5 figures.

Carl / / 3



DANTY, GENEAL

"Nýtovení v letectví a v loděřství; příručka pro inženýry a techniky.
(Tid, 1.) Praha, France, 1951. 311 s. (příručka pro inženýry, sv. 1.)
(Application of riveting to aeronautics and related fields. I. 1951.,
titl., subject index, tables)

SO: East European, I. C. Vol. 2, No. 12, Dec. 1953

DANEK, OTTO

Aromatic mercury halides. Otto Danek and Jaroslav Nosek (To *Vysokomolokuljarnaja Chimija* and *Chem. Zvests. Narodni podnik*). U.S. 2,899,239, Aug. 25, 1960. R_2HgCl are produced in a continuous reaction in which arylidiazonium salts are prepd. in the presence of Hg halide in acid medium at 0-5°, to form double salts, which are decomd. at about 5-10° in the presence of Cu, Zn or Sn give lower yields. Thus, to 130 kg. HgCl_2 in 200 l. concd. HCl was added 46.5 kg. PhNH_2 , followed by 800 kg. ice and 85 kg. NaNO_2 under 5°. The partly double salt was decomposed at 5-10° in the presence of 31.8 kg. Cu bronze yielding a ppt. of 66.6% PhHgCl ; the soln. contained HgCl_2 . Similarly 2- $\text{C}_6\text{H}_5\text{NH}_2$ gave 61.8% *p*- $\text{C}_6\text{H}_4\text{HgCl}$; *p*- $\text{MeC}_6\text{H}_4\text{NH}_2$ gave 71.7% *p*- $\text{MeC}_6\text{H}_4\text{HgCl}$.
 HgBr , m. 233°. Reaction of 130 kg. HgCl_2 , 60 kg. NaBr, 200 l. concd. HCl, 46.5 kg. PhNH_2 , and 85 kg. NaNO_2 , followed by 31.8 kg. powd. Cu gave 85% PhHgBr . Cf. U.S. 2,899,114 (C.A. 47, 1188e).
G. M. Kosolapoff

DANEK, O.

Production of 4-isopropylbenzyltin compounds. Coll Cz Chem 26
no.8:2035-2039 '61.

1. Forschungsinstitut für organische Synthesen, Pardubice-Rybitvi.

S/081/62/000/023/110/120
B117/B186

AUTHORS: Daněk, Otto, Novák, Jindřich

TITLE: Method of stabilizing chlorine-containing polymers and co-
polymers, and other highly chlorinated compounds

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1962, 751, abstract
23P526 (Pat. CzSSR 100677, August 15, 1961)

TEXT: To prevent the discoloration of chlorine-containing polymers, e.g.
polyvinyl chloride, additions (0.5 - 5%) of compounds having the common
formula $(C_4H_9)_2Sn(OOCCH=CHCOOR)_2$ are used during heating. R stands for
2-ethyl hexyl, dimethyl cyclohexyl (isomer mixture), alkyl, or alkenyl with
8 - 20 C atoms. [Abstracter's note: Complete translation.]

Card 1/1

LANER, C.

preparation of salicylic acid-fluoride derivatives. *Chem. Abstr.* 1964, no. 3:230-237 Mr 164.

1. Research Institute of Organic Syntheses, Pardubice-Rybitv..

DANEK, O.

Preparation of a history of the...
of the... of... April...

... of... of... of...
... of...

DANEK, R.

Preparation of research programs, p. 14, ZA SOCIALISTICKOU VĚDŮ A
TECHNIKOU (Přípravný výbor vědeckých technických společností při
eskoslovenské akademii věd) Praha, Vol. 5, No. 1, Jan 1955

SOURCE: East European Accessions List (EAL) Library of Congress,
Vol. 4, No. 12, December 1955

DAN E, R.

Program of this periodical for 1955, p. 17, ZA SOCIALISTICKOU VĚDŮ A
TECHNIKOU (Přípravný výbor vědeckých technických společností při es-
loslovenské akademii věd) Praha, Vol. 5, No. 1, Jan. 1955

SOURCE: East European Accessions List (AL) Library of Congress,
Vol. 4, No. 12, December 1955

Z/006/61/000/018/001/001
E073/E535

AUTHOR: Daněk, Radoslav

TITLE: Up to Six Times Longer Service Life

PERIODICAL: Technické noviny, No. 18, May 3, 1961, p. 5

TEXT: As a result of joint work of Technolen and the Vyzkumný ústav pro valivá ložiska (Antifriction Bearings Research Institute) VÚVL, Brno, a new type of special belt for driving grinding spindles has been produced. Several types of belts were tested. rayon, silon, polyamide and terylene strips with various types of impregnation and some imported materials. Best results were achieved with woven terylene belts impregnated with oil-resistant rubber. During high speed grinding tests on a BDA 40 machine a comparison was made between the performance of these belts and the performance of rayon belts impregnated with linseed oil. A terylene belt of equal strength weighs only a third of that of a rayon belt, it hardly stretches at all during service. The "third coefficient" of this belt is about 15% higher and it can be used for circumferential speeds up to 80 m/sec, whilst rayon belts are suitable only for speeds up to 30 m/sec. The vibrations of the ground spindle

Card 1/2

Up to Six Times Longer . . .

Z/006/61/000/018/001/001
E073/E535

were 30% lower and the waviness of the ground surface was reduced by 20%. The noise dropped from 105 db to 95 db. The power consumption was 1 kW lower for the terylene belt than for the rayon belt. The cost of the terylene belt is about 45% higher but the service life is 2 to 6 times as long. Terylene belts will be used by the ZKL Works, Brno for their grinders BDA 40, for their oscillating grinders etc. The new type of belt enabled carrying out high speed grinding with a BDA 40 grinder. This new type of belt proved very satisfactory and is as good as any foreign produced belt. The above Research Institute recommends that it should be generally used for grinders. It is manufactured by Technolen, Lomnice nad Popelkou.

[Abstractor's Note: This is a complete translation. "silon" is a polycapronamide $(-HN(CH_2)_5CO-)_n$]

Card 2/2

BALEK, A. [Bálek, Alexej]; DANEK, S. [Daněk, Stanislav], inzh.; POFF, A. [Poff, Arthur], inzh.; KOLVODA, Ya. [Kalvoda, Jan], doktor; SHMID, Y. [Schmid, Josef], inzh.; ŠKVR, I. [Švor, J.], doktor; VAYTTS, A. [Waits, Antonín], inzh.; ROMASHKIN, N.I. [translator]; VEKSHIN, G.K. [translator]; TKACHEVA, T.K. [translator]; OSTROUMOVA, V.S., red.; SEMENOVA, N.Kh., red.; KAPRALOVA, A.A., tekhn.red.

[General inventory of fixed assets in Czechoslovakia] General'naya inventarizatsiia osnovnykh fondov v Chexhoslovakii. Moskva, Gos. statist.izd-vo, 1959. 101 p. (MIRA 13:2)
(Czechoslovakia--Inventories)

S 261 62 000 009 001 001
1007 1207

Authors Beran, J., Daněk, V., and Kopecký, F.

Title PUMP FOR LIQUID METALS [Abstractor's note: incomplete translation of Czech title]

Periodical Referativnyi zhurnal. Mashinostroyeniye, no. 9, 1962, abstract 349150; *Techn. sprava* (KAD), v. 6, no. 12, 1960, 393-399.

Text Description is given of a pump for conveying liquid metals. A system of rotating permanent magnets creates a rotating magnetic field. The movable pumping tube passes between the pole shoes of these magnets.

[Abstractor's note: Complete translation.]

Card 11

DANEK, V., inz.; RYBAR, J., inz.

Examination of flow conditions in turbocompressors by means
of electrolytic bath. Strojirenstvi 12 no.10:760-767
10 0 '62.

1. Ceskomoravska-Kolben-Danek Praha.

MATIASOVSKY, Kamil, inz., C. Sc.; DANEK, Vladimir, inz.; MALINOVSKY,
Milan, doc., inz., C. Sc.

Contribution to the methods of measuring the critical flux
density in cryolite fusion electrolysis. Chem zvesti 17
no.3:211-216 '63.

1. Ustav anorganickej chemie, Slovenska akademia vied, Bratislava,
Dubravska cesta (for Matiasovsky). 2. Katedra anorganickej
chemie, Slovenska vysoka skola technicka, Bratislava, Kollarovo
namesti 2 (for Danek and Malinovsky).

DANEK, Vaclav, inz.; TEPLY, Karel, ins.

Results of the experimental operation of program controlled
knee-type milling machines in the Tovarny na obrabeci stroje
Kurim National Enterprise. Stroj vyr 11 no.5:222-232 My '63.

1. Tovarny na obrabeci stroje Kurim, n.p. Kurim.

DANEK, Z.

DANEK, Z. Remarks on forest transportation in mountains. p. 17.

Vol. 29, no. 8, Aug. 1955

LAS POLSKI
AGRICULTURE
Poland

So: East European Accession, Vol. 6, No. 5, May 1957

Dr. Jerzy M. G. Libonick

Prace o osteoliza i neurotrofiza. Pol. tyg. lek. 19 no. 35
135-137 35 str. 164.

Instytut Radiologicznej Akademii Medycznej w Krakowie
Katedra i Klinika prof. dr. Stanislaw Januszkiwicz.

SZAFRAN, Leslaw; DANEK, Zbigniew; WITEK, Jerzy

Usefulness of routine roentgenographic examination in the diagnosis of intra-orbital foreign bodies. Pol. tyf. lek. 20 no.38:1425-1427 20 S '66.

1. z Kliniki Radiologicznej AM w Krakowie (Kierownik: prof. dr. Stanislaw Januszkiewicz) i z Kliniki Chirurgii AM w Krakowie (Kierownik: prof. dr. Marian Wl. Gek).

SECRET, 16 July 1974; MATTHEW J. CARROLL, 1974

with a picture of the author's portrait
and a list of his works. The author's name is

Matthew J. Carroll, 1675 Massachusetts Avenue, N.W.,
Washington, D.C. 20006. Telephone: 202-338-1111.

PANEL, Ervin, inz.

Automatic locking of two main panels in case of a fire alarm are
deck. Unit No. 2/44/61. 48

1. Saved automatically a mechanical National Institute of Standards.

USSR/Mathematics - Non-Euclidean space

FD-1431

Card 1/1 : Pub. 64 - 9/9

Author : Danelich, I. A. (Kursk)

Title : Unique determinability of infinite convex polyhedra in a Lobachevskian space

Periodical : Mat. sbor., 35 (77), pp 569-573, Nov-Dec 1954

Abstract : By a polyhedron the author, following A. D. Aleksandrov, means a surface composed of a finite number of polygons (a polygon is a region on a plane bounded by a finite number of segments). In the present work the author demonstrates the unique determinability of closed convex polyhedra in a Lobachevskian space by utilizing Cauchy's lemma. One reference, A. D. Aleksandrov, Vypuklyye mnogogranniki [Convex polyhedra], Moscow-Leningrad, State Technical Press, 1950.

Institution :

Submitted : December 9, 1953

AUTHOR:

Danelich, I. A.,

20-2-4/62

TITLE:

The Unique Definiteness of Several Convex Surfaces in the Lobachevskiy Space (Odnosnachnaya opredelennost' nekotorykh vypuklykh poverkhnostey v prostranstve Lobachevskogo)

PERIODICAL:

Doklady Akad. nauk SSSR, 1957, Vol. 115, Nr 2, pp. 217-219, (USSR)

ABSTRACT:

This paper consists of the description of 4 definitions, one lemma and 8 theorems. The author defines the following concepts: cap, generalized orispheric cap in the Lobachevskiy space, infinite convex surface with p infinitely distant points, sharply convex infinite surface. The theorems: Theorem 1: F_1 be a convex cap with limited specific curvature in the Lobachevskiy space and F_2 be an isometric cap to it. Then F_2 is congruent to F_1 or its mirror image. Theorem 2 says something on the existence of a generalized "orispheric" cap isometric to the surface F . Theorem 3: Every in itself convex, finite domain on a convex surface is isometric to a certain generalized orispheric cap. Theorem 4 deals with the congruence or the mirror image congruence of the surfaces F_1 and F_2 . Theorem 5 treats the replaceability of the surfaces F_1 and F_2 by means of a movement or a movement with reflection. Theorem 6: When the pointed, even, convex, infinite surface F_1 with limited specific curvature is isometric to the convex, even surface F_2 , the surface F_2 is congruent or mirror image congruent to F_1 . Theorem 7: The set of points ω of a convex surface F of the Lobachevskiy space, which has no normal

Card 1/2

The Unique Definiteness of Several Convex Surfaces in the Lobachevskiy Space. 20-2-4/62

Dupin's indicatrix, has the measure zero. Theorem 8 treats the existence of a derivation in every normal point of a convex surface F of the Lobachevskiy Space. There are 4 references, 3 of which are Slavic.

ASSOCIATION: Kursk State Pedagogical Institute (Kurskiy Gosudarstvennyy pedagogicheskiy institut)

PRESENTED BY: Aleksandrov, P. S., Academician, February 2, 1957

SUBMITTED: May 24, 1956

AVAILABLE: Library of Congress

Card 2/2

DANELICH, I.A.

Surfaces of bounded absolute mean integral curvature and their plane sections. Sib. mat. zhur. 4 no.3:519-538 My-Je '63. (MIRA 16:6)
(Surfaces) (Topology)

DANELICH, I.A. (Kursk)

Generalization of A.D. Aleksandrov's class of type T surfaces
and one characteristic of convex closed surfaces. Mat. sbor.
62 no.2:180-185 0 '63. (MIRA 16:10)

... H, ...

Surfaces of bonded asbestos can be removed with an
edge. It is not clear if this is a low level of ...

... :

ACC: A. 13695

SOURCE CODE: 09/0199/66 07/094/0964/009

Author: Melich, I. A.

General representation of the absolute mean integral curvature of a polyhedral surface and corollaries ensuing therefrom

Matematicheskii Sbornik, v. 7, no. 4, 1966

Subject: Solid geometry, mathematics

The author states that the mean integral curvature of a polyhedral surface is equal to the sum of the absolute mean integral curvatures of its faces. The author also states that the mean integral curvature of a polyhedral surface is equal to the sum of the absolute mean integral curvatures of its faces. The author also states that the mean integral curvature of a polyhedral surface is equal to the sum of the absolute mean integral curvatures of its faces. Several theorems are then formulated with respect to the integral representation of the absolute mean integral curvature of a polyhedral surface. Orig. art. has: 7 formulas.

Math. 513.736.35

Card 1/1

UDC: 513.736.35

09/0199/66 07/094/0964/009

ACC NR: AP7008932

SOURCE CODE: UR/0199/66/007/005/1199/1203

DANELICH, I. A.

"Evaluating the Area of a Surface of a Bounded, Absolute Mean Integral Curvature Through Its Absolute Mean Integral Curvature and the Sum of the Lengths of the Boundary Curves"

Novosibirsk, Sibirskiy Matematicheskiy Zhurnal, Vol 7, No 5, Sep-Oct 66, pp 1199-1203

Abstract: The present article is intended to supplement an earlier article by the author on such surfaces in which there were no evaluations of surface area. The following theorem is formulated: "Let F be a surface of bounded, absolute mean integral curvature whose boundaries are rectifiable. Then F is a rectifiable surface and its area

$$\sigma(F) \leq (2/\pi^2)[M(F) + (\pi/2)S] \cdot [M(F) + (\pi/4)S],$$

where S is the sum of the lengths of the boundaries and $M(F)$ is the absolute mean integral curvature of F . If, in this connection, F is a closed surface, then

$$\sigma(F) \leq (2/\pi^2)M^2(F)."$$

Encl. art. has: 2 formulas. [JPRS: 40,303]

REF: none

IC TAGS: mathematics, geometry

SUB CODE: 12

Card 1/1

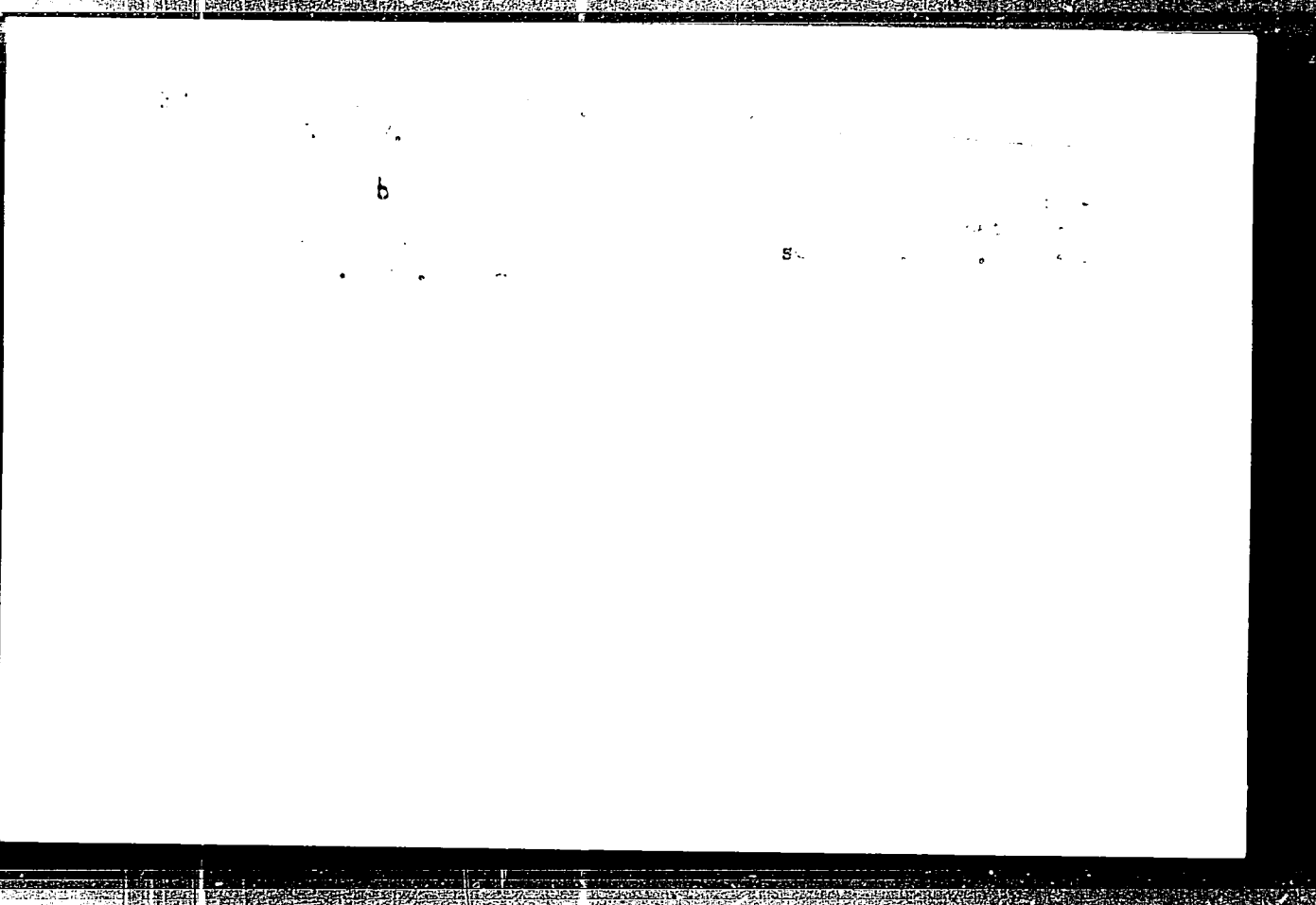
UDC: 513.736.35

DANELIK, I.Ya., assistant

Materials on the study of the role of the nervous system in the pathogenesis of experimental tuberculosis of the gastrointestinal tract. K izuch. roli nerv. sist. v pat., immun. i lech. tub. no. 2:229-236 '61. (MIFA 15:1C)

1. Iz laboratorii eksperimental'noy patologii i terapii (zav. - G.S.Kan) Leningradskogo instituta tuberkuleza i iz kafedry legochnogo tuberkuleza (zav. prof. A.D.Semenov) Gosudarstvennogo instituta dlya usovershenstvovaniya vrachey.

(ALIMENTARY CANAL--TUBERCULOSIS) (NERVOUS SYSTEM)



GARDNER, G.S., and Ten... "An... of
 the umbilical vessels... in...
 ...
 ... Particularities of
 ...
 ... for the ... of ...
 and ... of ...
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TSAGARELI, G.A.; PKHAKADZE, S.M.; DANFIYA, G.S.

Some characteristics of the clinical course and histological picture of atypical proliferation of the chorial epithelium. Trudy Inst. eksp. morf. AN Gruz. SSR 11:251-256 '63.

(MIRA 17:11)

1. Institut akusherstva i ginekologii Ministerstva zdravookhraneniya GruzSSR.

SI 11-21-58-7-7865

Translation from Referativnyy zhurnal, Matematika, 1958, No. 2, p. 80 (USSR)

AUTHOR Daneliya, G. Z.

TITLE Elongation and Flexure of a Tapered Composite Girder Caused by a Force Couple (Rastvazheniye i izgib pri vyzhennogo sostavnogo bruska)

PERIODICAL Tr. Gruz. politekh. inst. 1957, Nr 4 (s. 2), pp. 135-148 (in Georgian); Russian résumé

ABSTRACT The problems of tension and bending stresses in a tapered composite girder generated by a force couple are examined. The "tapered" bar configuration, according to P. M. Riz (see Izv. AN SSSR, Ser. matem., 1939, Nr 4) is taken to be a body bounded by a surface $F(x) + kz = \gamma(1 - \rho^2 z) = 0$ and two planes $z = 0$ and $z = 1$, where k is a small parameter, the squares and the higher powers of which are disregarded, and γ is a constant. By using the small parameter method the problems posed are reduced to the problems of deformation of a prismatic beam stressed by specific body and surface forces. The three-dimensional problems obtained subsequently are reduced to boundary problems relative to the plane of the composite region; it is demonstrated that these problems can be

Card 72

5. 1. 24 11. 1. 1957

•Elongation and Flexure of a Layered Composite Laminated

solved. However, the displacement components obtained do not remain continuous when traversing the surfaces of a material separation. In the previous work of the author, under the same title (see Izv. Akad. Nauk SSSR, 1955, Nr 2 (37) 167-174; RZhMekh, 1957, Nr 2, abstract 2342) a case was investigated where the materials constituting the girder have the same Poisson ratio but different modulus of elasticity. In the present case the solution of P. M. Riz for a homogeneous girder is adopted with hardly any changes.

A. K. Rikhadze

Изв. АН СССР, 1955, № 2, с. 167-174

ACCESSION NR: AP4024471

S/0141/64/007/001/0094/0100

AUTHOR: Daneliya, I. A.; Tsintsadze, N. L.

TITLE: On the theory of wave interaction in a plasma

SOURCE: IVUZ. Radiofizika, v. 7, no. 1, 1964, 94-100

TOPIC TAGS: plasma, wave interaction in plasma, longitudinal wave interaction, electron ion plasma, oblique wave propagation, nonlinear interaction, interaction frequency, Langmuir frequency, plasma particle flux, plasma current density

ABSTRACT: The fundamental electrodynamic equations are derived for the interaction of longitudinal waves with one another in an electron-ion plasma to which an electric field is applied. It is shown that if the direction of propagation of the longitudinal waves makes some angle to the direction of the translational plasma motion induced by the electric field, then nonlinear interaction between the

Card 1/2

ACCESSION NR: AP4024471

longitudinal waves gives rise to transverse waves. The equations derived for the field in the second-order approximation show that the interaction frequency is double the Langmuir frequency. The equations obtained by M. Sumi (J. Phys. Soc. Japan, v. 15, 1086, 1960) are particular cases of those derived in the present paper. Calculation of the particle flux in the plasma shows that since the mean current density differs from zero in the second approximation, the resultant magnetic field causes the electrons and ions to drift. Orig. art. has: 16 formulas.

ASSOCIATION: None

SUBMITTED: 11Mar63

DATE ACQ: 15Apr64

ENCL: 00

SUB CODE: PH

NO REF SOV: 004

OTHER: 002

Card 2/2

L 15330-65 EWT(1)/EWG(k)/EPA(sp)-2/EPA(w)-2/EEQ(t)/T/EEC(b)-2/EWA(m)-2
 PG-4/Pz-6/Pab-10/P1-l IJP(c)/BSD/SSD(b)/SSD/AFWL/AEDC(a)/ASD(f)-2/ASD(p)-3/
 AFETR/RAEM(a)/RAEM(c)/ESD(gs)/ESD(t) AT

ACCESSION NR: AP4045266

8/0057/64/034/009/1576/1579

AUTHOR: Daneliya, I.A.; Tsintsadze, N.L.

TITLE: On an anomalous magnetohydrodynamic diffusion of a plasma 13

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.9, 1964, 1576-1579

TOPIC TAGS: magnetohydrodynamics, wave phenomenon, nonlinear oscillations, plasma diffusion anomaly

ABSTRACT: The authors discuss nonlinear effects accompanying the isothermal propagation of magnetoacoustic waves transversely to a uniform magnetic field in a perfectly conducting fluid. The approximate treatment of the nonlinear effects is accomplished by expanding the variable portion of the magnetic field, the density, and the velocity in Fourier series in the wave phase and in power series in a formal parameter that is equated to unity at the end. These expansions are substituted into the magnetohydrodynamic equations, and coefficients of similar trigonometric terms and of like powers of the formal parameter are equated. Expressions are then derived for the second order constant terms in terms of the first order (linear) terms. In deriving these expressions, certain terms that lead to instabilities (i.e.

1/2

L 15330-65

ACCESSION NR: AF4045266

to waves with increasing amplitude) are assumed to vanish. It is found that non-vanishing second order constant terms exist in the magnetic field, the density and the velocity, i.e., that the magnetic field strength and the density are greater within a wave packet than without it, and the waves are accompanied by a flow of matter analogous to Rayleigh's acoustic wind. An expression due to Yu.A.Kirochkin (Izd.VUZov.Radiofizika 5,1104,1962) for the amplitude of (linear) acoustic waves excited by thermal fluctuations is substituted into the expression for the velocity; there is thus obtained an expression for the diffusion resulting from the mechanism considered. This diffusion is anomalous in the sense that in a strong magnetic field the velocity is inversely proportional to the first power of the magnetic field. In a weak field, however, the diffusion is normal, i.e., inversely proportional to the square of the field. Orig.art.has: 21 formulas.

ASSOCIATION: none

SUBMITTED: 26Dec62

ENCL: 00

SUB CODE: ME

NR REF SOV: 004

OTHER:001

2/2

L 26974-65 EWT(L)/EPA(sp)-2/T/EEC(t)/EPA(w)-2/EWA(m)-2 Pz-6/P6-4/Pab-10/Pl-4

IJP(3) AT

* ACCESSION NR: APS003261

S/0057/65/035/001/0174/0175

AUTHOR: Daneliya, I.A.

58
38

TITLE: Transformation of a longitudinal high frequency field by the ionic-acoustic spectrum

SOURCE: Zhurnal tekhnicheskoy fiziki, v.35, no.1, 1965, 174-175

TOPIC TAGS: plasma, plasma diagnostics, plasma interaction, plasma wave, nonlinear plasma, nonlinear oscillation

ABSTRACT: *On the basis of previous results (V.I. Potvashvili, DAN SSSR 153, 1296, 1963; I.A. Akhiezer, I.A. Daneliya and I.L. Tsintsadze, ZhETF 46, 300, 1964) the author calculates the cross sections for the transformation of an extraneous Langmuir wave into a transverse wave and for the scattering of the Langmuir wave with the production of another longitudinal wave of different frequency as a result of the nonlinear interaction of the Langmuir wave with the ionic-acoustic waves. The result should be of interest in connection with plasma diagnostics. Orig.art.has: 7 formulas.*

2)

Card 1/2

L 26974-65

ACCESSION NR: AF6003261

ASSOCIATION: Tbilisskiy gosudarstvennyy universitet (Tbilisi State University)

SUBMITTED: 28Jun64

ENCL: 00

SUB CODE: ME

NR REF SOV: 002

OTHER: 000

Card 2/2

ACCESSION NR: AP4012558

S/0056/64/046/001/0300/0306

AUTHORS: Akhiezer, I. A.; Daneliya, I. A.; Tsintsadze, N. L.

TITLE: Contribution to the theory of conversion and scattering of electromagnetic waves in a nonequilibrium plasma

SOURCE: Zhurnal eksper. i teoret. fiz., v. 46, no. 1, 1964, 300-306

TOPIC TAGS: plasma, nonequilibrium plasma, nearly unstable plasma, electromagnetic wave scattering, electromagnetic wave conversion, spontaneous emission in plasma, plasma fluctuation waves, plasma external waves, critical plasma fluctuation, nonlinear wave interaction, Doppler scattering

ABSTRACT: The conversion and scattering of electromagnetic waves in a nearly unstable plasma are investigated, with principal emphasis on wave scattering and conversion in which the intensity of the produced radiation becomes anomalously large by virtue of the existence

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ACCESSION NR: AP4012558

of critical fluctuations. The spontaneous emission caused by the scattering of an external longitudinal wave by critical plasma fluctuations and by the transformation of such a wave into a transverse wave is also included. Two cases of nonlinear wave interactions are considered, the passage of a plasma with hot electrons through cold ions and the passage of a fast charged-particle beam through a plasma. The spontaneous emission caused by the conversion of fluctuating longitudinal wave. Only Doppler scattering is included in the analysis of induced scattering of waves by particles." In conclusion we wish to thank A. I. Akhiezer, V. P. Silin, and A. A. Rukhadze for valuable discussions." Orig. art. has: 30 formulas.

ASSOCIATION: None

SUBMITTED: 21Jun61

DATE ACQ: 26Feb64

ENCL: 00~

SUB CODE: PH

NO REF SOV: 004

OTHER: 003

Card 2/2

DEZHIY, I.A.

Transformation of a longitudinal high-frequency field as shown
by the ionic-sonic spectrum. Zhur. tekhn. fiz. 35 no. 1:174-175
Ja '65.

1. Tbilisskiy gosudarstvennyy universitet.

L 63111-65 EAT(1)/EPF(n)-2/ENG(m)/EPA(w)-2 IJP(c) AT

ACCESSION NR: AP5020359

UR/0141/65/008/003/0469/0475
533.951

AUTHOR: Daneliya, I. A.; Tsintsadze, N. L.

TITLE: Transformation of electromagnetic waves in a non-equilibrium plasma

SOURCE: IVUZ. Radiofizika, v. 8, no. 3, 1965, 469-475

TOPIC TAGS: plasma electromagnetic wave, electromagnetic wave scattering, nonuniform plasma, unstable plasma

ABSTRACT: The theory of scattering and transformation of electromagnetic waves by thermal fluctuations in equilibrium and non-equilibrium plasmas is well developed. The non-linearity of equations describing a plasma leads to interaction of waves with one another, resulting in scattering of waves and transformation of one mode of wave into another. The authors examine the problem of transformation of transverse and longitudinal electromagnetic waves by critical fluctuations of the transverse or longitudinal field. It is shown that the transformation coefficient in these processes rises sharply as the plasma approaches the unstable state. The phenomenon of "spontaneous absorption" associated with conversion of two transverse

26
24
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21

Card 1/2

L 63111-65

ACCESSION NR: AP5020359

2
fluctuation waves into longitudinal is investigated. The kinetic equation is given for the particle distribution function taking into account the back scattering of secondary waves generated by non-linear interaction of the oscillations. Orig. art. has: 18 formulas.

ASSOCIATION: Institut fiziki AN Gruz. SSR (Institute of Physics, AN Gruz. SSR);
Tbilisskiy gosudarstvennyy universitet (Tiflis State University)

SUBMITTED: 25Apr64

ENCL: 00

SUB CODE: EM, ME

NO REF SOV: 010

OTHER: 003

llc
Card 2/2

DANSLIYA, N. P.

32480. Nekotoryye rezul'taty metoda poperechnoy tsirkulyatsii. Izvestiya Gruz. nauch.-issled. In-ta gidrotekhniki i meliratsii, t. I, 1949, s. 127-38.--rezyume na gruz. yaz.

SO: Letopis' Zhurnal'nykh Statey, Vol. 50, Moskva, 1949

DANELIYA, N.F., kandidat tekhnicheskikh nauk.

Frontal water barrier

with double, slit-collecting side tunnels. Gidr. i
mel. 5 no.6:26-35 Je '53. (MLBA 6:7)

(Dams)

15-57-4-5429

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 4,
p 188 (USSR)

AUTHORS: Daneliya, N. P., Salomova, V. V.

TITLE: Some Types of Water-Bending Structures at River Bends
(Nekotoryye tipy vodozabornykh sooruzheniy na izgibe
reki)

PERIODICAL: Tr. Gruz. n.-i. in-ta gidrotekhn. i melior., 1956, Nr 4,
pp 157-167.

ABSTRACT: The authors discuss the principles of layout and give
examples of levees on curving banks. Comparisons of
the results of studies of different plans for lateral
and frontal levees at river bends lead to the conclusion
that a Y-formed dam in combination with a curvilinear
underwater channel is the proper anti-detrital measure
under conditions that the stream does not carry bottom
sediment at the low-water stage. Ye. I. P.

Card 1/1

DANELIYA, H.F., kandidat tekhnicheskikh nauk; BOBOKHIDZE, Sh.S., kandidat tekhnicheskikh nauk.

Water-intake works with grills on upper and lower levels. Gidr. stroi. 25 no.2:43-47 '56. (MLRA 9:8)
(Hydraulic engineering) (Dane)

SOV 124 58 10-11150

Translation from: Referativnyy zhurnal Mekhanika (1958) Nr 10 p 63 (USSR)

AUTHOR: Daneliya N F

TITLE: The Fundamentals of the Arrangement of a Lateral Water Intake With Sediment-Intercepting Sluiceways (Osnoynykh ustroystva bokevogo vodozabera s nanosoperekhvaty avashchimi gaterivami)

PERIODICAL: Tr. Gruz. inzh. in-ta gidrotekhn. i melior. (1957) Nr 18-19, pp 301-322

ABSTRACT: The author presents the fundamental requirements for the siting of a water intake with a lateral water discharge and with sediment-intercepting tunnels located at the sill and on the upstream flank of the water intake structure. The author points out the fields of application of such a type of water intake, the special features of its construction, and the fundamentals of the design of the water intake structure and of the tunnels. Bibliography: 5 references.

V. V. Fildevel

Card 1 of 1

DA [unclear], [unclear], [unclear]— " [unclear]
 [unclear] *profane letter* [unclear]
 [unclear] [unclear] [unclear] [unclear] [unclear] [unclear]
 [unclear] [unclear] [unclear] [unclear] [unclear] [unclear]
 V.P. [unclear], [unclear] [unclear] [unclear] [unclear] [unclear]
 [unclear] [unclear] [unclear]

30(1)

AUTHOR: Daneliya, N.F., Doctor of Technical Sciences

TITLE: Principle of Operation of Side Water-Intaking Structure with Sediment Control Galleries

PERIODICAL: *Gidrotekhnika i melioratsiya*, 1983, No. 1, p. 19-21, 7 figs.

ABSTRACT: To meet the problem of an adequate operation of a water-intaking structure, it is first of all necessary to construct properly that part of it where water enters the installation. The main fault encountered in the operation of water-intaking structures is the clogging of them by sediments. In this article, the author describes a structure built somewhere in the Transcaucasus that operates on the principle of controlling the activity of water that passes through the head-and-tail water basins. In Figure 1, the general layout of such a structure is given. Water enters into the sediment control galleries which maintain the level at a predetermined height by letting

Card 143

Principles of Operation of Side Water-Intaking Structure with Sediment Control Galleries

the the surplus water flow back over the dam into the river. These galleries serve to retain rough sediments by means of a special device noted in Figure 1 under (16). In the spring or early winter, during the ice-drift time, the galleries also take care of ice by preventing its entrance into the structure, for which purpose special grates are provided; if the ice-drift takes place at particularly low temperatures of air and water, these grates have to be periodically changed and cleaned to secure a free admission of water into the gallery. Test the upper water basin should be clogged by fine sediments suspended in the water that enters it, a periodical flushing of the basin must be performed every 5-10 days. The flushing operation lasts 1,5 to 2 hours. As for the tail water basin, it should also be periodically cleaned, but always before the flushing of the upper basin is done. When the water-intake process takes place, the

Card 2/3

Principles of Operation of Side Water-Intaking Structure with
Sediment Control Galleries

flushing apertures of the dam shall be closed, while
the galleries have to be opened. There are schematic
matic diagrams

ASSOCIATION: GruzNIIGIM

Card 7 / 7

DANELIYA, N.F.

Formation of river beds at water intake structures on mountain
and foothill sections of rivers. Trudy Gruz NIIGiM no.21:37-48
'60. (MIRA 1:1)

(Hydraulic engineering)

DANELIYA, N. F.; GRIGOLASHVILI, K. Z.; DAMONASHVILI, G. N.

Waves in a swift current and their calming by directing fins.

Trudy GPI [Gruz.] no. 4:51-58 '63. (MIRA 17:5)

DANELIYA, Nikolay Fedorovich, prof.; Prinimatala ucraštije SADOVA,
V V.; YELIZAVETSKAYA, G V. red.

[Water-intake structures for rivers with abundant bottom
sediments] Vodozabernye sooruzhenia na rekakh s obil'-
nymi donnymi наносami. Moskva, Kolos, 196. 33^e p.
(MIRA 17:12)

DANELIYA, R.G.

Traveling speed of ball-shaped bottom sediments in a water
current. Trudy GRUZ NIIGIM no.21:271-278 '60. (MIRA 1b:1)
(Hydraulic conveying)

MIRTSKHULAVA, TS. Ye.; DANELIYA, R. G.

Role of the depth of flow in raising the resistance to washout of soils constituting the river bed subjected to erosion by the stream. Dokl. AN SSSR 147 no.6:1437-1440 D '62.
(MIRA 16:1)

1. Gruzinskiy nauchno-issledovatel'skiy institut gidrotehniki i melioratsii. Predstavleno akademikom D. V. Nalivkinym.

(Rivers) (Erosion)

DANELIYA, R.G.

Effect of the stream depth on the permissible (nonerosive) velocities. Soob. AN Gruz. 30 no.1:19-24 Ja '63. (MIRA 17:1)

1. Gruzinskiy nauchno-issledovatel'skiy institut gidrotekhniki i melioratsii, Tbilisi. Predstavleno chlenom-korrespondentom Akademii P.G. Shengeliya.

DANELIYA, T.V.

Workers of the canning industry of Georgia mark the 22d Congress of the CPSU with new achievements. Kons. 1 ov. prom. 16 no.10: 3-4 0 '61. (MIRA 14:11)

1. Gruzinskiy konservnyy trest.
(Georgia—Canning industry)

DANILOVA, G. I. 'Entitled to' (dissemination) observations of patients
with hypertension and heart defects under the conditions of the "Krasnaya".
Moscow, 1951. 12 pp. Min. Health. BSMN, State Inst. of Psychiatry and
'Therapy', 200 copies (K). No 11, 14, 15.

DATESHIDZE, D.G.; DANELIYA, Z.I. (Sukhumi)

Method for measuring the respiratory volume per minute. Vrach delo
no.9:140 S '61. (MIRA 14:12)

1. Abkhazskiy filial instituta kurortologii Gruzinskoy SSR.
Nauchnyy rukovoditel' - prof. A.G.Dembo.
(RESPIROMETER)

IVALTVAUF, T.G. IATVCHIS T, ...
change in some indices of the ...
in cardiovascular patients under the ...
Inudy Inst. Kilit. Ekspet. KART. ...
...
... institut kurnologii ...

DANETOV, I. B. and MATKOV, M. P. (Inst. of Physical Problems

"New Radio Techniques at the Institute for Physical Problems"

has been submitted for the Army Corps of Engineers, Research and Development, Fort Monmouth, NJ, August 1964, publication, Pre-

INFORMATION L

Pa - 1016

CARD 1 / 2

SUBJECT USSR / PHYSICS
 AUTHOR PEVZNER, M.I., DANELJAN, L.S., ADAMČUK, J. V.
 TITLE The Total Neutron Cross Section of Ra²²⁶
 PERIODICAL Atomnaja Energija, 1, fasc.4, 67-70 (1956)
 Issued: 19.11.1956

Here the results of measurements of the total cross section of Ra in the energy interval 0,022-50 eV, which were carried out in 1953, are published.

Apparatus and test conditions: This total cross section was measured with a mechanical selector with transversal rotator. The container with the sample was placed on an adjusting table between two nickel collimators while measuring was being carried out. The shape of the neutron bundle when leaving the collimator was determined by the activation of a silver foil and following exposure of an X-ray film to this foil.

The samples consist of RaSO₄, for the neutron cross sections of S and O are small and thoroughly investigated. The thinnest sample, which was destined for measurement in the domain of resonance, consisted of RaBr. The RaSO₄ was filled into hermetically closed special containers of thin boron-less glass, and the RaBr was filled into a hermetically closed brass container.

Test results and their discussion: The energy dependence of the total neutron cross section of Ra²²⁶ is shown in a diagram as a function of the neutron energy (0,022-50 eV); within the domain of thermal energies the cross section of Ra changes like 1/v. At 0,537 eV there is a resonance level. The parameters of the

Atomnaja Energija, 1, fasc.4, 67-70 (1956) CARD 2 / 2 PA - 1115

level σ and Γ entering into the BREIT - WIGNER one-level formula were determined by successive approximation in consideration of DOPPLER'S broadening and the resolving power of the apparatus. In the case of the crystal structure of pure materials the thermal motion of the nuclei was computed in the same way as if the material to be investigated had been in a gaseous state. Experimental and computed data of the resonance parameters are shown in a table. For the energy 0,025 eV an absorption cross section of $\sigma(0,025 \text{ eV}) = (13,5 \pm 1,5)$ barn was determined by means of the formula by BREIT and WIGNER. In the energy interval 2-50 eV there is a strong scattering of experimental points and measuring accuracy is here 15-20%. The experimental data obtained permit no reliable conclusion to be drawn concerning the amount of the average distance between the levels of the radium. Apparently this distance is not smaller than 30 eV. The amount of the radiation width of the level at the energy 0,37 eV, namely $\Gamma \approx \Gamma = 0,029 \text{ eV}$ agrees with the general dependence of Γ on atomic weight.

INSTITUTION:

C-5

USSR/Nuclear Physics - Nuclear Reactions.

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8807

Author : Yerozolimskiy, B.G., Kutikov, I.Ye., Dlbrynin, Yu.P.,
Pevzner, M.I., Danelyan, L.S., Moskalev, S.S.

Inst :
Title : Measurement of the Average Quantity of Neutrons Emitted
Per Single Capture. ν_{eff} for Specimens of Pu²³⁹ with
an Admixture of the ----- Pu ²⁴⁰ Isotope and Measure-
ment of the Effective Resonance Integral of the Capture
of Pu²⁴⁰.

Orig Pub : Atom. energiya, 1956, No 3, 27-30

Abstract : ν_{eff} was measured for specimens of Pu²³⁹ with addition
of various quantities of Pu²⁴⁰ in the vicinity of the
Fermi spectrum with a left boundary of 0.15 (gadolinium
filter) and 0.4 ev (cadmium filter) for two series of spe-
cimens containing the following additions of Pu²⁴⁰ (in
percent): 0, 1.5, 2.5, 6.5, and 16. The Pu²⁴⁰ contents

Card 1/3

USSR/Nuclear Physics - Nuclear Reactions.

C-5

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8807

was determined in one specimen by measuring the number of spontaneous fissions in a multi-layer ionization chamber; in other specimens the relative amount of Pu²⁴⁰ was determined by comparing the areas of the dips in the resonance of Pu²⁴⁰ at 1.06 ev on the transmission curves, obtained by means of a mechanical neutron selector.

The procedure for determining ν_{eff} is based on the measurement of the effect of the capture and production of neutrons from the disturbance to the neutron field in a graphite prism with a central cavity, in which the investigated specimen is placed (see Referat Zhur Fizika, 1957, 557). The ratios ν_{eff}' / ν_{eff} of specimens

with and without Pu²⁴⁰ admixtures were measured. The results of the measurements are given in the following table:

Card 2/3

USSR/Nuclear Physics - Nuclear Reactions.

C-5

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 880.

Percentage Pu²⁴⁰ in the specimen.
 0 1,6 2,5 6,5 16

Weight of specimen, grams.
 8 0,55 0,39 1,00 0,51 1,02 0,52 0,99

μ_{eff} behind gadolinium filter.
 1,00 μ_{eff} 0,97 0,96 0,96 0,86 0,81 0,77 0,83

μ_{eff} Behind cadmium filter.
 1,00 μ_{eff} 0,84 1,81 1,81 0,49 0,55

The resonance integral of absorption of Pu²⁴⁰ is
 $\Sigma_{240} = (9,000 \pm 3,000) \times 10^{-24} \text{ cm}^2$.

Card 3, 3

Handwritten: *Handwritten notes*

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15558

TOTAL NEUTRON CROSS SECTION OF Ra^{226} *M. I.*
Payzner, L. S. Dzealyan, and Yu. V. Adzuzhuk. Soviet J. Atomic Energy 9, 817-20(1956).

The complete cross section of radium was measured in the energy interval 0.025 to 80 ev by means of a mechanical neutron selector. Resonance was found at $E_0 = 0.537 \pm 0.006$ ev. The resonance parameters, with Doppler spread and resolution of the equipment taken into account, are presented: $\sigma_0 = (3000 \pm 180)$ barn, $\Gamma = (0.029 \pm 0.001)$ ev, $\Gamma_2 = (2.1 \pm 0.1) \times 10^{-4}$ ev. (auth)

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E011/E155

AUTHORS: I. I. P. ... and
P. ...

TITLE: A method of ... for the energy
region 0.00

PERIODICAL: Priroda, Moscow, 1961, No. 5, pp 32-34

TEXT: Methods of ... have been described
in Soviet and foreign literature. They are useful when fairly
powerful beams of monoenergetic neutrons are used. They have
the advantages over ... giving a larger
neutron flux with a ... reflection
but they are ... in the energy
range 0.1-10 eV. This ... and
properties of ... instrument was
required to separate ... neutrons of the
same energy ... and to achieve the
greatest possible ... chamber
ensure satisfactory ... background. The
construction ... numbers have

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X

A mechanical design of a rotor for a 2000/2000/001/002/031
E. 20/E. 21

the following machine design: The rotor is a 3-core
4-bearing bearing assembly. The rotor is formed by forming the
slots. The slots are formed by forming the slots
to give a slot width of 0.127 mm. The slots are 700 mm long and
slots could be formed at a depth of 0.127 mm. The total
thickness of metal is 0.127 mm. The rotor is weakened
by a factor of 0.001 by the intensity of neutrons in the
energy range 0.001 MeV. The rotor is weakened by gamma
radiation which is 0.001 MeV. The rotor is weakened by
sensitive to gamma radiation. The rotor is weakened by
rotor end surface. The rotor is weakened by the amount of
peripheral speed. The rotor is weakened by the diameter as large
as possible. The rotor is weakened by the diameter of 2 mm external
diameter. The rotor is weakened by the diameter of bearing journals.
Eight ribs are provided on the rotor end surface and in these
a tube of high tensile strength material is shrunk on when
the internal diameter of the rotor is 0.127 mm and the
external diameter of the rotor is 0.127 mm. An annular space
divided into four parts of 0.127 mm. The slots are built
up as bundles of three slots with a width of 0.127 mm and a mean
Card 2/5

A mechanical neutron mono beam

57-0051/000/003/002/041
E 24/E 55

slot width of 0.347 mm. The slots are wedged in place. The total weight of the rotor was 270 kg and it was designed to operate at speeds up to 12000 r.p.m. but a speed of 10000 r.p.m. was finally selected in order to minimise vibration. The construction of the driving turbine is described in the report and operates at speeds up to 13 000 r.p.m. On leaving the source the beam passes through three collimators before reaching the rotor. The two outer collimators govern the angle of divergence of the neutron beam and the intermediate one reduces the background of scattered neutrons in the plane perpendicular to the slot walls. The beam is of constant width and in the plane parallel to the slot walls the edges from 100 mm at the luminous surface to 15 mm at the rotor. The cross section of the beam and hence the resolution may be varied by adjusting the first collimator which is of variable width. A graphical method was used to determine the appearance of monochromatic neutrons and the procedure of production explained. Because the slots move in a circumference the speed of rotation are not quite the same as they would be for a saw shaped rotor. For slots with parallel walls moving in a straight line the resolution and the lines determined graphically by the method are shown in Fig B Card 3/8.

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