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Present studies on wood technology. Ind lemnului 15 no. 3:102-106 Mr '64.

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Appearance and detection of electric charges in spinneries. II. p. 245.

(INDUSTRIA TEXTILA. Vol. 8, No. 6, June 1957, Bucuresti, Rumania)

SO: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, No. 10, October1957. Uncl.

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PERIODICAL: INDUSTRIA TEXTILA. Vol. 9, No. 10, Oct. 1958

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April 1959, Unclass.

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Elimination of electricity by means of radioactive substances. p.194.

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Bucuresti, Rumania
Vol. 10, no. 5, May 1959.

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November 1959
Uncl.

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Eliminating electric chargesin textile industry by means of air ionization. Ind text Rum 13 no. 3:97-101 Mr 62.

1. Institutul Politehnic, Brasov.

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[redacted], A., inz.

Determining the resonance frequency, sound propagation velocity, and modulus of elasticity in the case of longitudinal vibrations in wood. Ind lesnnaia 14 no.1:23-26 Ja '63.

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DIMBOIU MARIA

1

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Gary Gerard

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Drilling fluids for penetrating through productive formations. Petrol si gaze 12 no.9:391-400 S '61.

1. Institutul de Cercetari pentru Foraj si Extractie Cimpina.

(Oil well drilling fluids) (Emulsions)

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Drilling fluids for deep drilling. Petrol si gaze 13 no.2:62-70 F '62.

1. Institutul de Cercetari pentru Foraj si Extractie, Cimpina.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

IONESCU-MIHAIESTI, C.,academician; DIMBOVICEANU, Aristia.,; MUGHNIA, Soru.,; GANCEVICI, Gh.,; OPRESCU, C.C.

Chemical composition and biological properties of non-dialyzable polysaccharide fractions isolated from culture filtrates of tubercle bacilli of the $H_{37}v$ human type and the Vallee bovine type in synthetic medium. Stud. cercet. inframicrobiol., Bucur. 6 no.1-2: 141-154 Jan-June 55.

(MYCOBACTERIUM TUBERCULOSIS
$H_{37}v$ human strain & Vallee bovine strain, polysaccharide fractions from culture filtrates)
(POLYSACCHARIDES
non-dialyzable fractions from culture filtrates of M. tuberc., chem. composition & biol. properties)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

IONESCU-MIHAIESTI, C.,academician,; SORU, Eugenia.,; DIMBOVICEANU, Aristia,; PADURARU-DUMITRESCU, Maria,; WISNER, B.

Pathogenesis of tuberculosis. III. Study of the respiration and enzymatic complex of pathogenic and saprophytic Mycobacteria. Stud. cercet. inframicrobiol., Bucur. 6 no.1-2:155-186 Jan-June 55.

(MYCOBACTERIUM TUBERCULOSIS, metabolism
oxygen consumption & enzyme activity)
(MYCOBACTERIUM
phlei, oxygen consumption & enzyme activity)
(ENZYMES
enzymatic activity of M. tuberc. & M. phlei)
(METABOLISM
oxygen consumption of M. tuberc. & M. phlei)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

RUMANIA/Microbiology - Microbes Pathogenic for Man and Animals. F
Bacteria. Mycobacteria.

Abs Jour : Ref Zhur Biol., No 22, 1958, 99494

Author : Ionescu-Mihaiesti, C., Dimboviceanu, Aristia-Soru, E., Barber, C., Radulesku, E., Ganceviei, G., Sternberg, M.

Inst : Rumanian Academy

Title : Complete Antigen of the Glucido-lipido-nucleopolipiptide Type Extracted from Tubercle Bacilli of the Human Type $H_{37}RV$.

Orig Pub : Comun. Acad. RPR, 1956, 6, No 10, 1245-1250

Abstract : The authors obtained a complex of the glucido-lipido-nucleopolipeptide type by subjecting defatted microbe cells to the action of a borate buffer (pH 8.2). The obtained complex contains 30.48% of nucleinic acids (in nucleic acid and 15.98% of ribonucleic acid), 47%

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Abs Jour : Ref Zhur Biol., No 22, 1958, 99494

of reducing sugars and 9.74% of lipids. Following acid hydrolysis of this complex, 13 amino acids were detected with the aid of chromatography, among them 34.2% of alanine, 18.5% of glutaminic acid, 10.24% of aspariginic acid, and 8.37% of cysteine; besides that, 5 reducing sugars were found (16.5% of arabinose, 10% of galactose, 5.11% of mannose, 3.31% of ribose and 2.8% of glucose). The complex is split with the aid of electrophoresis into 4 fractions; they may be identified by the rate of migration with the following serum proteins: delta-globulin (8%), gamma-globulin (67%), beta-globulin (10%), and albumin (15%). The obtained complex possesses the properties of a complete antigen. Injected into rabbits, it causes the appearance in the serum of precipitins reacting with tuberculo-protein in dilutions of up to 1:6,250-1:12,500, and with the complete antigen in

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

RUMANIA/Microbiology - Microbes Pathogenic for Man and Animals. F
Bacteria. Mycobacteria.

Abs Jour : Ref Zhur Biol., No 22, 1958, 99494

dilutions of 1:1,600-1:3,200. -- L.M. Model'

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APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

GANCEVICI, G.; DIMBOVICEANU, A.

Structure of bacillary soluble antigens: dissociation of their hemo-sensitizing and hemagglutination-inhibiting action. Stud. cercet. inframicrobiol., Bucur. 7 no.1-2:177-188 Jan-June 56.

(ANTIGENS
M. tuberc. soluble antigens, dissociation of hemo-sensitizing & hemagglut.-inhibiting action)
(MYCOBACTERIUM TUBERCULOSIS
antigens, dissociation of hemo-sensitizing & hemagglut.-inhibiting action)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMBOVICEANU, ARISTIA

GANCEVICI, G.G.; DIMBOVICEANU, Aristia

Inhibiting effect of normal serum on the hemo-sensitizing action of the polysaccharide produced by Mycobacterium tuberculosis. Stud. cercet. inframicrobiol., Bucur. 7 no.3-4:503-515 July-Dec 56.

1. Comunicare prezentata in sedinta Institutului de inframicrobiologie al Academiei R.P.R.

(BLOOD
inhib. eff. of normal sera on hemo-sensitizing action of polysaccharide produced by M. tuberc.)
(POLYSACCHARIDES
from M. tuberc., inhib. eff. of normal sera on hemo-sensitizing action)
(MYCOBACTERIUM, TUBERCULOSIS
inhib. eff. of normal sera on hemo-sensitizing action of polysaccharide component of M. tuber.)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

IONESCU-MIHAESTI, C.; DIMBOVICEANU, Aristia; SOHU, Eugenia; RADULESCU, Elena; BARBER, Celia; GANCEVICI, G.; OPRESCU, C.C.; FLECHNER, I.; STERNBERG, M.

Chemical and antigenic properties of protein fractions isolated from filtrates of cultures of tubercle bacilli of the human type $H_{37}v$ in Sauton's medium. Stud. cercet. inframicrobiol., Bucur. 8 no.1:85-94 1957.

(MYCOBACTERIUM TUBERCULOSIS, culture
human type $H_{37}v$ bact. cultured in Sauton medium, chem. & antigenic properties of protein fractions)

(ANTIGENS
antigenic properties of protein fractions of M. tuberc., type $H_{37}v$, cultured in Sauton's medium)

(PROTEINS
protein fractions of M. tuberc., type $H_{37}v$, culture in Sauton's medium, chem. & antigenic properties)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

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IOJESCU-MIHAIESTI, C., Academician; DIMBOVICEANU, Aristea; SORU, Eugenia; BARBER, Cela; RADULESCU, Elena; DUMITRESCU, Maria; WISNER, B.

Studies of murine tuberculosis bacillus (Mycobacterium muris; vole bacillus Wells). Bul. stiint. sect. med. 8 no.1:199-218 Jan-Mar 56.

(MYCOBACTERIUM
vole bacillus, growth & changes of composition in Sauton medium)

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Research on the proliferation of streptococcus in the presence of anesthesine and novocaine. Rev chimie 4 no.2:207-226 '59. (EEAI 9:7)

1. Institut de Serologie "Dr. I.Cantacuzino" et Laboratoire de Chimie organique de l'universite "C.I.Parhon" de Bucarest. 2. Comite de redaction, Revue de Chimie; Membre correspondant de l'Academie de la Republique Populaire Roumaine (for Angelescu).
(Streptococcus) (Procaine) (Benzocaine)

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DIMCHEV, D.

Application of high frequency currents in the treatment of certain types of helminthiasis. Savrem. med., Sofia 5 no.3:78-84 1954.

1. Iz tsentralniia khigienen institut pri MNO (nachalnik: prof. Zdravko Mitnov).

(HELMINTH INFECTIONS, therapy,
electrother., high frequency currents)
(ELECTROTHERAPY, in various diseases,
helminth infect., high frequency currents)

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DIMCHEV,D.; BURZEVA,L.; APRAKHAMIAN,G.; APOSTOLOV,L.; TSONEV,I.; PANITSA, D.; PRIKOLOGIN,M.; GENEVA,V.

On causes,appearance, clinical aspects, therapy and prophylaxis of organic phosphate poisoning in the rural industry in the Plovdiv region. Suvrem. med.,Sofia 11 no.2-3:80-89 '60.

1. Iz VMI "I.P.Pavlov" - Plovdiv, i Okruzhnata sanitarno-epidemiologichna stantsiia - Plovdiv.
(PHOSPHATES toxicol.)

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DIMCHEV, M.

A formula for determining the norm of the discharged water of small dams in Dobruja. Khidro i meteorolog no.2:3-14 '60. (EEAI 10:1)
(Bulgaria--Water) (Bulgaria--Dams)

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DIMCHEV, R.

Some results of the socialist competition in the machine-tractor stations during 1955. p. 30. MASHINIZIRANO ZEMEDELIE. Vol. 7, no. 7, July 1957. Sofiia, Bulgaria

SOURCE: East European Accessions List, (EEAL) Library of Congress, Vol. 6, No. 1, January 1957

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DIMCHEV, T.

Effect of encroaching water on asbestoscement pipes. p. 93. Bulgarska akademita no naukite. Teknicheski institut. IZVESTILA. Sofiya. no. 3, 1955.

SOURCE: East European Accessions List. (EEAL) Library of Congress. Vol. 5, No. 8, August 1956.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

L 9021-66 FCC/EWP(j)/T/EWA(h)/EWA(1) IJP(c) RM

ACC NR: AP6000629 SOURCE CODE: PO/0046/65/010/008/0477/0483

AUTHOR: Dimchev, Teodor

ORG: Central Laboratory for Radioactivity Protection, Institute of Physics, Bulgarian Academy of Sciences, Sofia

TITLE: A low-background beta scintillation counting method with thin plastic sandwich phosphors

SOURCE: Nukleonika, v. 10, no. 8, 1965, 477-483

TOPIC TAGS: beta counter, scintillation counter, scintillator, beta detector

ABSTRACT: A "simple" beta scintillation sandwich counting method for measuring low activities with plastic phosphors 0.254 mm thick is described. NE102 plastic scintillators coupled with the 13-stage 9514S photomultiplier were used as beta-sensitive phosphors (see Fig. 1). Scintillating plastic disk 6 is placed directly above a photocathode 40 mm in diameter. Optical contact between the window of the photomultiplier and the plastic is obtained by a thin layer of liquid paraffin. Beta-source 5 is an evaporating radioactive solution of a transparent polyethylene foil 0.01 mm thick. A second scintillating disk 4 is at a distance of 10 mm. Directly above it is a light-back-scatterer, a plastic disk 3. A platinum back-scatterer 2 adheres to it. An 8-mm air layer separates the radioactive source from the second plastic phosphor. The entire assembly is placed in an N664A EKCO head unit which has a built-in

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amplifier with a gain range from 25 to 1000. The pulses from the phototube go first to the amplifier and then to an N529A EKCO scaler. The lead shield of the counter is

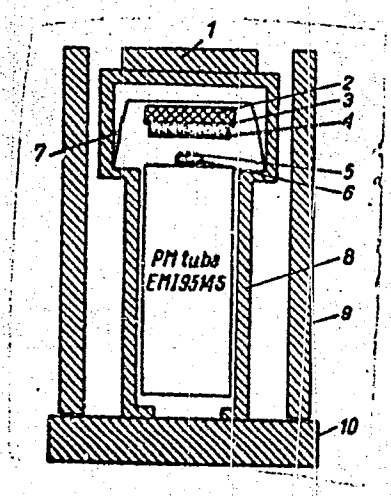

Fig. 1. Counter design

1 - 50-mm lead; 2 - platinum back-scatterer, a disk 40 mm in diameter and 2 mm thick; 3 - light back-scatterer; 4 - plastic disk 40 mm in diameter and 0.01 mm thick covered with a thin layer of aluminum; 5 - radioactive source; 6 - plastic scintillator 20 mm in diameter and 0.254 mm thick; 7 - light-sealing aluminum cover; 8 - 25-mm lead; 9 - 50-mm lead; 10 - 70-mm lead.

75 mm thick. The working voltage of the photomultiplier is fixed by taking anode characteristics for each of the measured isotopes. The basic criterion for optimum working conditions (for each isotope a separate working point) is the maximum of the

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function f^2/N_t, where f is the efficiency and N_t is the background. This criterion is actually fulfilled in a point of the curve (count rate vs voltage) before saturation or at the beginning of it. All measurements of the counter were made at room temperature. Simple radiometrical instruments were applied (no anticoincidence or special shielding of the counter was used). With a background of 0.87 cpm without cooling the photomultiplier, the efficiencies obtained were 39 percent for ^{90}Sr ^{90}Y, 19.5 percent for ^{204}Tl, and 1.25 percent for ^{147}Pm. Lowered background and increased counting efficiency are made possible by cooling the photomultiplier and using light pipe between the plastic phosphors and the photocathode. Orig. art. has: 6 figures. [JA]

SUB CODE: 18/ SUBM DATE: 31Mar65/ ORIG REF: 002/ OTH REF: 007/ ATD PRESS: 4154

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APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMCHEV, T.

Investigation of the intensity of the rains in Bulgaria in relation to their duration and frequency. p. 145.

IZVESTIIA. Bulgarska akademiia na naukite. Tekhnicheski institut. Sofiia, Bulgaria, Vol. 7/8, 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, No. 1, January 1960.

Uncl.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMCHEV, P.; NIKOLOVA, I.

Some results from the application of radioactive indicators in studying technical aspects of the wells in Northeastern Bulgaria. Min delo 17 no.12:7-9 D '62.

1. Fizicheski institut pri BAN (for Dimchev). 2. Nauchno-izsledovatelski geologski institut (for Nikolova).

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DIMCHEV, T.; SYRNEV, L. [Surnev, L.]

Changes in the work function of PbS monocrystals with the change of gas medium. Doklady BAN 16 no.6:577-580 '63.

1. Predstavleno akad. G. Nadzhakovym, chlenom Redaktsionnoy kollegii, "Doklady Bolgarskoy Akademii nauk".

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

L 22634-66 EWA(h)

ACC NR: AT6004205 SOURCE CODE: BU/2503/65/013/001/0031/0042

AUTHOR: Dimchev, T.; Raychev, Kh.

ORG: none

35
B+1

TITLE: Some local changes in Gamma-field distribution on the surface of the soil related to radioactive fallout 19

SOURCE: Bulgarska akademiya na naukite. Fizicheski institut. Izvestiya na Fizicheskiya institut s ANEB, v. 13, no. 1, 1965, 31-42

TOPIC TAGS: radioactive fallout, atmospheric contamination, atmospheric radioactivity, radioactivity measurement, Gamma radiation, radioisotope

ABSTRACT: Local changes in the distribution of the terrain Gamma-field manifested chiefly in some highland areas have been examined. Abrupt anomalously high values of the strength of the dose created by Gamma radiation from the terrain have been noted. Studies have revealed a very typical rise in the values observed in areas not

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ACC NR: AT6004205

covered with grass. Results are given of measurements of the Gamma background in haystacks from pastures from various highland areas. Gamma spectroscopic and radiochemical studies have been made of soil and other samples to explain the origin of the anomalies observed. Analysis of the data of field and laboratory investigations indicates the presence of a new phenomenon, namely a local accumulation of fission products due to global contamination as the result of current nuclear tests. Some of the concentrations of fission products found in the soil are very high and give grounds to assume the presence of active factors of transfer and migration of fission products from the atmosphere to the ground. The approximate age of the mixtures of radioisotopes has been determined and the ratio of the basic long lived products cerium-144 and cessium-137 has been determined. The investigation is still in its initial stage, however, it has been established beyond any doubt that radioactive fallout, concentrating under the action of meteorological, hydrological, orographical and other factors, may create a very high level of local radioactive contamination even under the conditions of global dispersal of long lived products originating from the stratosphere

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

L 22634-66

ACC NR: AT6004205

reservoir. The investigation has shown that direct measurements of the anomalies in the distribution of the terrain Gamma background can be made. Orig. art. has: 3 figures and 2 tables. [Based on author's abstract]

SUB CODE: 18/ SUBM DATE: none ORIG REF: 002/ SOV REF: 009/
OTH REF : 010/

Card 3/3

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMCHEVA, L.

"Role of Russian and Soviet scientists in the development of embryology" (p.2) PRIRODA I ZNANIE (Bulgarsko prirodoizpitatelno druzhestvo) Sofiya Vol 7 No 1 Jan 1954

SO: East European Accessions List Vol 2 No 7 Aug 1954

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KOCHANKOV, D.; MADZHAROV, G.; KUNCHEV, N.; TSVETKOV, T.; DIMCHEVA, L.; KOSTOVA, K.; LUMBARSKI, Vl.

Sanatorial therapy of diabetes at Bankia spa. Suvrem. med. Sofia 8 no.3: 37-43 1957.

1. Iz. Sanatorium No. 2 - MSKU - Bankia (Gl. lekar: d-r D. Kochankov).
(DIABETES MELLITUS, therapy,
sanatorial (Bul))

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

PASPALEV, G.; DIMCHEVA, L.; DENCHEV, D.

Results from experiments in transporting fertilized and nonfertilized trout caviar roe. Izv Zool inst BAN 9:359-372 '60.
(EEAI 10:9)

(Caviar) (Trout)

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DIMCHEVA-GROZDANOVA, L.

SCIENCE

Periodical: GODISHNIK Vol. 50, no. 1, 1955/56 (published 1957)

DIMCHEVA-GROZDANOVA, L. Contribution to the study of the origin and development of the ovaries in Moniezia expansa (Rud 1810). p. 299.

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 2 February 1959, Unclass.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

PASPALEV, G.V.; DIMCHEVA-GROZDANOVA, L.

Experiments in the development of trout roe in a moist atmosphere. Godishnik biol 54/55 no.1:117-144 '59/60-'60/61 [publ. '62].

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DIMCHEVSKIY, N.

What disarmament would bring to the people. Vsem.prof.dvizh. no.2:5-7 F '60. (MIRA 13:2)
(Disarmament) (War--Economic aspects)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

SHMIT,V.[Smits, Viktors Petera d.]; DIMDIN,Ya.[Dimdins,J.], red.; CHAKSH, Ya. [Caksa,J.], tekhn. red.; UURE,V., tekhn. red.

[Bark beetles; Ipidae in the Latvian S.S.R.] Mizgrauzi; Latvijas PSR teritorija sastopamas Ipidae sugas. Riga, Latvijas Valsts izdevnieciba, 1960. 207 p. [In Latvian] (MIRA 14:12)
(Latvia--Bark beetles)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

BUMBURE, M.; GALENIEKS, P., prof., doktor; JADZEME, V.; LIVENA, Dz.; PETERSONE, A.; DIMDINS, J., red.; AIZUPIETE, M., tekhn. red.

[Flora of the Latvian S.S.R.]Latvijas PSR flora. P.Galenieka red. Riga, Latvijas Valsts izdevnieciba. Vol.3. 1957. 459 p. [In Latvian]

(MIRA 15:1)

(Latvia—Botany)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

BIRKMANE, K.; BUMBURE, M.; GALENIEKS, P., prof., doktor; JAUDZEME, V.; PETERSONE, A.; OZOLINA, E., retsenzent; LANGE, V., retsenzent; DIMDINS, J., red.; KRASOVSKA, M., tekhn. red.

[Flora of the Latvian S.S.R.]Latvijas PSR flora. P.Galenieka red. Riga, Latvijas Valsts izdevnieciba. Vol.4. 1959. 524 p. [In Latvian] (MIRA 15:1)

(Latvia--Botany)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

GORSKIN, Jevgenijs; CHERKOVSKIS, P.[translators]; DIMDINS, J. [translators]; ROZKALNE, V.[translator]; LIELPETERIS, P., red.; PASTARE, D., tekhn. red.

[Problems in the specialization of livestock raising in the Latvian S.S.R.] Latvijas PSR lopkopibas specializacijas problemas. Riga, Latvijas Valsts izdevnieciba, 1961. 106 p. Translated from the Russian. (MIRA 15:3)
(Latvia—Stock and stockbreeding)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

KAULINS, Alberts; LEVTOVS, Arons; DIMDINS, J. [translator]; CEPKOVSKIS,P., red.; ZAGARS, A., tekhn. red.

[Agricultral planning for elementary schools and study groups on agricultural economics] Lauksaimnieciskas razosanas planosana; lauksaimniecibas ekonomikas pamatskolu un pulcinu klausitajiem. Riga, Latvijas Valsts izdevnieciba, 1961. 47 p. (MIRA 15:3)

1. Sekretar' rayonnogo komiteta Latviyskoy kommunisticheskoy partii goroda Ogre (for Kaulins).
(Agriculture)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

HERMANE, S., kand. biolog. nauk; SMITS, J., agronom; DIMDINS, J., red.; CAKSS, J., tekhn. red.

[Intensive carp and duck raising] Intensiva karpu un pilu audzesana. Riga, Latvijas Valsts izdevnieciba, 1961. 63 p. (MIRA 15:3)

(Latvia--Carp) (Latvia--Ducks)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

PETERSONE, Anna; OZOLINA, M., farmats. retsenzent; SUSTERS, J., kand. med. nauk, retsenzent; DIMDINS, J., red.; KRASOVSKA, M., tekhn. red.

[Wild medicinal plants] Savvalas arstniecibas augi. Riga, Latvijas Valsts izdevnieciba, 1961. 457 p. (MIRA 15:3)
(BOTANY, MEDICAL)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

GURSKIS, Verners; DIMDINS, J., red.; UDRE, V., tekhn. red.

[Using herbicides in weed control] Nezalu apkarošana ar herbicidiem. Riga, Latvijas Valsts izdevnieciba, 1962. 143 p. (MIRA 16:5)
(Weed control) (Herbicides)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

CAKSTINA, Tatjana ; DIMDINS, Ē., red.; SPORANE, V., tekhn. red.

[Orchard pests and diseases] Auglu darzu kaitekli un slimibas. Riga, Latvijas Valsts izdevnieciba, 1962. 220 p.
(MIRA 16:5)
(Fruit—Diseases and pests)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

KAGANS, D.; YEKHLAKOV, [illegible]; ZUKOV, L.[translator]; [illegible], J., red.

[Polyethylene pipes in agriculture; planning, laying and assembling] Polietilena caurules lauksaimniecība; projektesana, iegulāisana un montaza. Rīga, Latvijas Valsts izd-ba, 1964. 104 p. (MIRA 18:1)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMELIS, Dimitrios, inz.

Approximate determination of iron content in flour. Prum potravin 13 no.12:658-660 D '62.

1. Statni inspekce jakosti vyrobku potravinarskeho prumyslu, Praha.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENBERG, F.M.

PHASE I BOOK EXPLOITATION SOV/3416

Akademiya nauk SSSR. Institut mashinovedeniya

Voprosy prochnosti materialov i konstruktsiy (Problems of Strength of Materials and Structures) Moscow, 1959. 399 p. Errata slip inserted. 3,200 copies printed.

Resp. Ed.: D. N. Reshetov, Professor, Doctor of Technical Sciences; Ed. of Publishing House: G. B. Gorshkov; Tech. Ed.: S. T. Shikin.

PURPOSE: This book is intended for engineers and scientists concerned with the problems of the strength of materials and construction.

COVERAGE: The book contains 28 articles on the strength of materials in general and of machine construction in particular. This collection was prepared under the direction of the Institute of Mechanical Engineering of the AS USSR in honor of Sergey Vladimirovich Serensen, one of the founders and directors of the national school of strength of materials, who recently completed 30 years of scientific activity. The preface gives a short sketch of his life and professional activities. The collection is divided into two parts. The first part contains 13 articles on general problems of strength and the strength of machine construction materials. The second part contains 15 articles on dynamics and calculation of strength and rigidity. There are references at the end of each article.

PART II. DYNAMICS AND CALCULATION OF STRENGTH AND RIGIDITY

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BUL'BA-POPKOV, V.S.; DIMENSHTEYN, L.Ye.; GOLUBEVA, I.V.

Set of instruments for bipolar coagulation. Vop.neirokhir. 20 no.4: 45-47 Jl-Ag '56. (MLRA 9:11)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov Ministerstva zdravookhraneniya SSSR.

(ELECTROCOAGULATION, appar. and instruments
instrument set for bipolar coagulation)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

ZIMNEVA, Yelena Matveyevna [deceased]; SHIBALOVA, Lidiya Ivanovna; SHEMANOVA, Valentina Pavlovna; DIMENT, Esfir' Markovna; GAHERTSETTEL', Andrey Ivanovich; KONDRAT'YEVA, Zinaida Sergeyevna; KLIMOVA, V.A., inzh., retsenzent; POPILOV, L.Ya., nauchnyy red.; VASIL'YEVA, N.N., red.; TSAL, R.K., tekhn. red.

[Seawater corrosion of copper alloys]Morskaia korroziia mednykh splavov. Leningrad, Sudpromgiz, 1963. 84 p. (MIRA 16:2)

(Copper alloys--Corrosion)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

FEDOROV, S.F.; DIMENT, K.Ye., KHARIONOVSKIY, R.A.

Geological characteristics, and oil and gas potentials of the Ural Mountain portion of Perm Province. Geol. nefti i gaza 6 no.6:5-11 Je '62. (MIRA 15:6)

1. Institut geologii i razrabotki goryuchikh iskopayemykh AN SSSR.
(Perm Province--Petroleum geology)
(Perm Province--Gas, Natural--Geology)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

FEDOROV, S.F.; DIMENT, K.Ye.

Conditions for the formation of oil and gas pools in Bashkiria. Dokl. AN SSSR 150 no.6:1340-1343 Je '63. (MIRA 16:8)

1. Chlen-korrespondent AN SSSR (for Fedorov).
(Bashkiria--Petroleum geology) (Bashkiria--Gas, Natural--Geology)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

FEDOROV, S.F.; DIMENT, K.Ye.

Arch uplift in the Ural mountain region of Perm Province.
Dokl. AN SSSR 157 no. 2:341-344 Jl '64. (MIRA 17:7)

1. Chlen-korrespondent AN SSSR (for Fedorov).

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

FEDOROV, S.F.; OVANESOV, G.P.; VINNITSKIY, Yu.S.; DIMENT, K.Ye.

Geology and prospects for finding oil and gas in Bashkiria.
Sov. geol. 7 no.10:88-97 O '64. (MIRA 17:11)

1. Institut geologii i razrabotki goryuchikh iskopayemykh.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

STEFKOV, D.; PRAKHOV, T.; DIMITROVA, Sv.

On clinical aspects of acute leukemia. Suvr. med. 12 no.9:27-34 '61.

1. Iz Okruzhnata bolnitsa D-r Racho Angelov, Sofiia (Gl. lekar Khr. Manchev)

(LEUKEMIA)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMITROV, T. (Kolarovgrad)

Building the phototheca for a physics study room. Mat i fiz Bulg 5 no.5:36-37 S-O '62.

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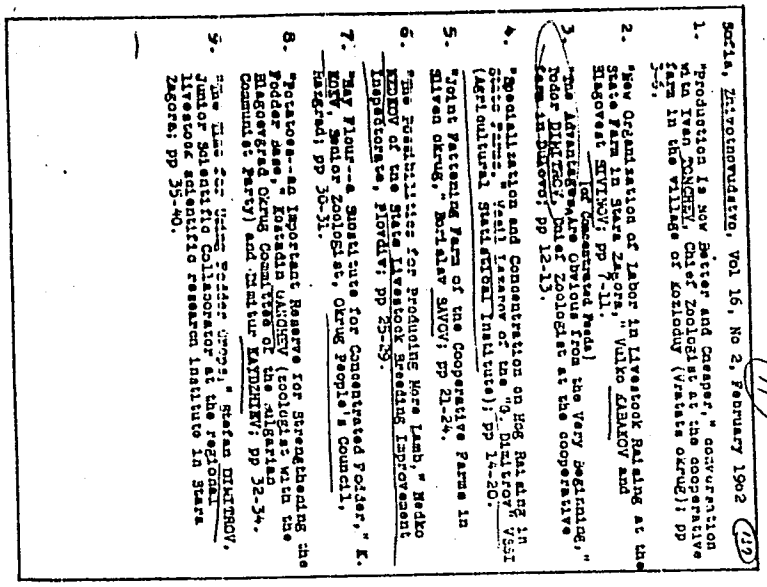
DIMITROV, T.



Sofia, Zhivotnovudstvo, Vol 16, No 2, February 1962 (12)

1. "Production is now better and cheaper," conversation with Ivan DONCHEV, Chief Zoologist at the cooperative farm in the village of Kozloduy (Vratsa okrug); pp 3-5.
2. "New Organization of Labor in Livestock Raising at the State Farm in Stara Zagora," Vulko ZABAKOV and Blagovest SIVILKOV; pp 7-11.
3. "The Advantages Are Obvious from the Very Beginning," Todor DIMITROV, Chief Zoologist at the cooperative farm in Dulovo; pp 12-13.
4. "Specialization and Concentration on Hog Raising in State Farms," Vasil Lazarov of the "G. Dimitrov" VSI (Agricultural Statistical Institute); pp 14-20.
5. "Joint Fattening Farm of the Cooperative Farms in Silven Okrug," Boriliav SAVOV; pp 21-24.
6. "The Possibilities for Producing More Lean," Hedko KENOV of the State Livestock Breeding Improvement Inspectorate, Plovdiv; pp 25-29.
7. "Hay Flour--a Substitute for Concentrated Fodder," K. KOEV, Senior Zoologist, Okrug People's Council, Razgrad; pp 30-31.
8. "Potatoes--an Important Reserve for Strengthening the Fodder Base," Kostadin VANCHEV (zoologist with the Blagoevgrad Okrug Committee of the Bulgarian Communist Party) and Dimitur RAYDZHEV; pp 32-34.
9. "The Use of 'Other Crops'," Stefan DIMITROV, Junior Scientific Collaborator at the regional Livestock Scientific Research Institute in Stara Zagora; pp 35-40.

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ACC NR: AP6011473 SOURCE CODE: PO/0046/65/010/09-/0585/0594

AUTHOR: Dimczew, Todor--Dimchev, T. 30 B

ORG: Laboratory of Radioactivity, Institute of Physics, BAN, Sofia; Central Laboratory for Radiological Protection, Warsaw (Centralne Laboratorium Ochrony Radiologicznej)

TITLE: Low-background beta scintillation counting 19 without shielding

SOURCE: Nukleonika, v. 10, no. 9-10, 1965, 585-594

TOPIC TAGS: scintillator, spectrum analysis, scintillation counter, beta counter

ABSTRACT: The spectrum analysis of the beta background for a thin plastic scintillation counter is presented. The background spectrum was measured with an old lead shield and without it. The possibility of the application of the scintillation counter for low-level beta counting without the lead shield is discussed. A plastic scintillator 13.5 mg/cm^2 thick and a photomultiplier were used as a detector. The apparatus allows measurement of low-level beta background in the laboratory as well as under field conditions. The author thanks Prof.-Dr. L. Jurkiewicz for assistance and valuable attention as well as for compilation of this work. Further thanks goes to the Dir. CLOR, Grad. Engr. J. Pensko, as well as the Institute of Physics BAN for making the carrying out of this work possible. Orig.art. has: 9 figures [Based on author's Russian abst.] [NA]

SUB CODE: 18 SUBM DATE: 17Jul65 / ORIG REF: 003 / OTH REF: 002

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ACC NR: AP6014474 SOURCE CODE: PO/0046/65/010/09-/0595/0604

AUTHOR: Dimczow, Todor--Dimchev, T. 33 B

ORG: Laboratory of Radioactivity, Institute of Physics, BAN, Sofia; Central Laboratory for Radiological Protection, Warsaw (Centralne Laboratorium Ochrony Radiologicznej) 19

TITLE: Some spectrometer properties of counter with thin plastic phosphor used for measuring beta-particles of sup 90 Sr + sup 90 Y

SOURCE: Nukleonika, v. 10, no. 9-10, 1965, 595-604

TOPIC TAGS: strontium, ytterbium, scintillator, beta counter

ABSTRACT: The differential spectrum $^{90}Sr + ^{90}Y$ obtained by means of a plastic beta scintillator are shown. The thickness of the scintillator was 13.5 mg/cm^2; the parameters of the counter included voltage of the photomultiplier, gain of the preamplifier, and thickness of the scintillator. The purpose of measurement was to establish the best conditions for using very thin plastic scintillators as a counter for $^{90}Sr + ^{90}Y$ detection. The author thanks Prof.-Dr. L. Jurkiewicz for assistance and valuable attention in the compilation of this work. Thanks is also given to the Dir. of CLOR, Grad. Engr. J. Pensko as well as to the Institute of Physics BAN for making possible this work. Thanks is also given to Grad. Engr. M. Jagusztyn for attention in the compilation of the results and the editing of this work. Orig. art. has: 9 figures. [Based on author's Eng. abst.] [NA]

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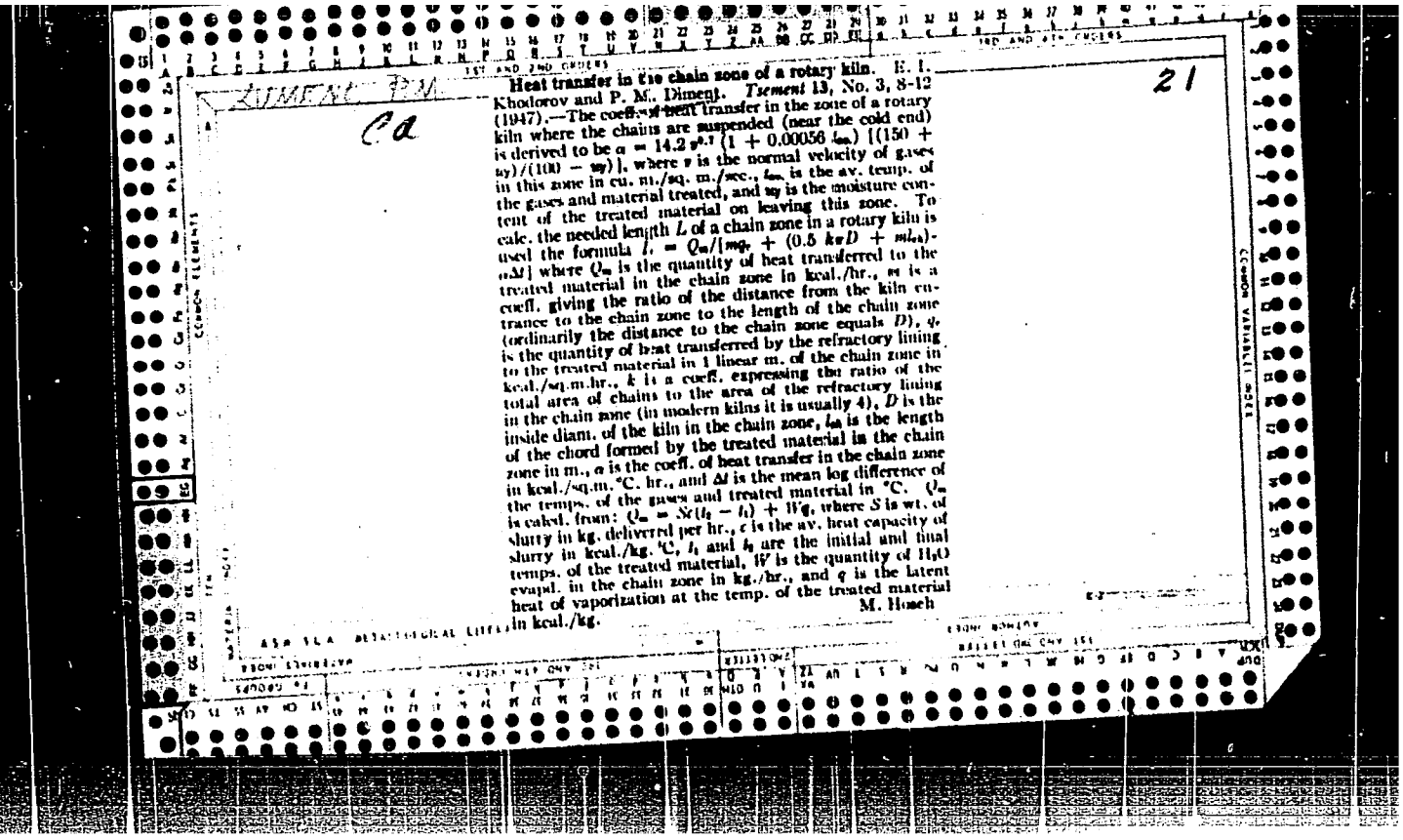

Heat transfer in the chain zone of a rotary kiln. E. I. Kholorov and P. M. Dimenl. *Tsement* 13, No. 3, 8-12 (1947).—The coeff. of heat transfer in the zone of a rotary kiln where the chains are suspended (near the cold end) is derived to be $\alpha = 14.2\,v^{0.7}\,(1 + 0.00056\,t_{av})\,[(150 + w)/(100 - w)]$, where v is the normal velocity of gases in this zone in cu. m./sq. m./sec., t_{av} is the av. temp. of the gases and material treated, and w is the moisture content of the treated material on leaving this zone. To calc. the needed length L of a chain zone in a rotary kiln is used the formula $L = Q_m/[mq_r + (0.5\,k\pi D + ml_{ch})\alpha\Delta t]$ where Q_m is the quantity of heat transferred to the treated material in the chain zone in kcal./hr., m is a coeff. giving the ratio of the distance from the kiln entrance to the chain zone to the length of the chain zone (ordinarily the distance to the chain zone equals D), q_r is the quantity of heat transferred by the refractory lining to the treated material in 1 linear m. of the chain zone in kcal./sq.m.hr., k is a coeff. expressing the ratio of the total area of chains to the area of the refractory lining in the chain zone (in modern kilns it is usually 4), D is the inside diam. of the kiln in the chain zone, l_{ch} is the length of the chord formed by the treated material in the chain zone in m., α is the coeff. of heat transfer in the chain zone in kcal./sq.m.°C. hr., and Δt is the mean log difference of the temps. of the gases and treated material in °C. Q_m is calcd. from: $Q_m = Sc(t_k - t_i) + Wq$, where S is wt. of slurry in kg. delivered per hr., c is the av. heat capacity of slurry in kcal./kg. °C, t_i and t_k are the initial and final temps. of the treated material, W is the quantity of H_2O evapd. in the chain zone in kg./hr., and q is the latent heat of vaporization at the temp. of the treated material in kcal./kg.

M. Hosch

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENT, P.M., inzhener.

Problem of selecting the profile of a rotary kiln. TSement 21 no.1: 30 Ja '55. (MLRA 8:4)
(Cement kilns)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

15 (6) SOV/101-59-1-2/10

AUTHORS: Diment, P. M., Viktorenkov, V. I., Gorbachevich, I. D., Petrosyants, G. V., Grin'ko, A. R.

TITLE: A Rotary Kiln with Cyclone Heat Exchangers (Vrashchayushchayasya pech' s tsiklonnymi teploobmennikami) From the Work Experience of the Spasskiy Cement Plant (Iz opyta raboty Spasskiy tsementnogo zavoda)

PERIODICAL: Tsement, 1959, Nr 1, pp 7 - 12 (USSR)

ABSTRACT: The authors state that the heat of gases escaping from a rotary kiln working on a dry process is for the preparatory heating of the raw material mixture. Part of the process is carried out in the conveying calcinator, i.e. in the cyclone heat exchangers. The latter are assembled at the rear of the "Lepol" type kilns. In such kilns, prior to the calcination of clinker, the plastic raw material containing about 12% water, ought to be granulated. When using cyclone heat exchangers, the non-plastic raw materials, practically devoid of water, may also be used for calcination. The workers of Giprotsement (State Planning Institute for Cement

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

A Rotary Kiln with Cyclone Heat Exchangers
From the Work Experience of the Spassk Cement Plant

Industry Enterprises) and workers of the Spasskiy tsementnyy zavod (Spasskiy Cement Plant) have designed a rotary kiln provided with cyclone heat exchangers. The output of this kiln will be 14 tons per hour. An installation of cyclones working in parallel is shown in a diagram (Fig. 1). The authors state that a 3 x 60 m rotary kiln, with one cyclone line, may produce 12 - 13 tons per hour. The specific heat expenditure is about 1,000 kcal/kg of clinker. The process of calcination itself is uniform, when consistency in the feeding and quality of the raw material mixture is maintained. Stop pages in the feeding of the raw mixture layer and pronounced differences in the constitution of mixture interfere seriously with the smoothness of the process, causing a drop in efficiency. The positive results obtained with the application of cyclone heat exchangers prove the usefulness of this device. The cyclones are recommended for application in the remaining kilns of the plant in question, and as well in other plants working on the dry process.

Card 2/2 There are 2 diagrams, 1 photograph and 3 tables.

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AREF'YEV, V.A., inzh.; DIMENT, P.M., inzh.

Use fuel and electric power economically. TSement 31 no.2:1-2 Mr-Ap '65. (MIRA 18:8)

1. Gosudarstvennyy vsesoyuznyy institut po proyektirovaniyu i nauchno-issledovatel'skim rabotam tsementnoy promyshlennosti, Leningrad.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F. M.

"Bennett's Mechanism," Prik. mat. i mekh., 4, No.3, 1940

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F. M.

O ratsional'nom raspolozhenii sterzhnei podmotornoi ramy samoleta. (Akademiia Nauk SSSR. Institut mekhaniki. Inzhenernyl sbornik, 1946, v. 2, no. 2, p. 77-86)

Summary in English.

Title tr.: Optimum arrangement of structural members of an aircraft engine mount.

TA4.A37 1946, v. 2

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F.M.

Primenenie metoda "dinamicheskoi zhestkosti" dlia rascheta sviazannykh kolebanii, (In: Serensen, S.V. Dinamika i prochnost'kolenchatykh valov. Moskva, 1948. p.248-301, illus., diagrs., bibliography)

Title tr.: Application of the method of "dynamic rigidty" for calculation of coupled oscillations.

TJ182.S4

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress 1955.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F.M.

Dimentberg, P. M. On a spatial string polygon. Akad. Nauk SSSR. Inzenernyĭ Sbornik 5, no. 1, 158–162 (1948). (Russian)

The author represents a force system by means of a "cross" consisting of one vector in a "horizontal" plane and one "vertical" vector [Bull. Acad. Sci. URSS. Cl. Sci. Tech. Akad. Nauk SSSR] Cl. Sci. Tech. 1939 no. 7, 53–72]. If $R_1, \cdots, R_n$ is a sequence of crosses, $S_0, S_1, \cdots, S_n$ is a "spatial string polygon" of it if $R_i + S_{i-1} = S_i$. The horizontal components of all the crosses inherit the same relationship. Crosses are reciprocal if the relative moment of the corresponding force systems is zero. The homologous sides of two plane string polygons belonging to the same force system intersect on the same straight line. This familiar theorem is generalized as follows: For p (<6) spatial string polygons ${}^kS_i$ ($k=1, \cdots, p$) of the same cross system there exist $p-1$ crosses reciprocal with every cross C_i reciprocal with each of the p homologous crosses ${}^kS_i$ (of same i). This theorem is applied to the analysis of a three-hinge arch.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F.M.

Dimentberg, F. M. A general method for finite displacements of spatial mechanisms and on certain passive constraints. Akad. Nauk SSSR. Trudy Sem. Teor. Mašin i Mehanizmov 5, no. 17, 7–39 (1948). (Russian)

This may be the first application of Clifford's dual numbers to the position problem of four to seven-bar spatial linkages, and the power of this method is here most impressive. The theory of screws in dual-number symbolics is briefly but adequately presented: If $\mathbf{u}$ is a sliding vector, $(a+\omega b)\mathbf{u}$ is a screw, $a\mathbf{u}$ being the translation, $b\mathbf{u}$ the angular velocity, and ω a complex unit with $\omega^2=0$. The dual angle α of two sliding unit vectors $\mathbf{u}$, $\mathbf{v}$ is $\alpha_0+\omega a_1$, where α_0 is the angle and a_1 their shortest distance. Their scalar product $\mathbf{u}\cdot\mathbf{v}=\cos\alpha=\cos\alpha_0-\omega a_1\sin\alpha_0$ and for their vector product $|\mathbf{u}\times\mathbf{v}|=\sin\alpha=\sin\alpha_0+\omega a_1\cos\alpha_0$, its axis being the common normal of $\mathbf{u}$ and $\mathbf{v}$. With these definitions the formulas for screw displacements become identical with those for pure finite rotations if all vectors are replaced by sliding vectors, and all angles of rotation φ by corresponding

$$(1+\phi^2)\mathbf{u}_1'=(1-\phi^2)\mathbf{u}_1+2(\mathbf{u}_0\cdot\mathbf{u}_1)\mathbf{u}_0\phi^2+2(\mathbf{u}_0\times\mathbf{u}_1)\phi,$$

where $\phi=\tan\varphi/2=\tan\varphi_0/2+\omega\varphi_1/2(1+\tan\varphi_0/2)$.

A four-bar spatial linkage (one turning pair and three cylindrical pairs) is defined by the four dual angles between adjacent axes. The bars are assumed as the common normals of adjacent axes. One of the bars forming the turning pair, is the crank, and its dual angle $\varphi=\varphi_0+\omega\varphi_1$ (φ_1 is constant here) is the independent variable in terms of which the other dual angles between adjacent bars are desired. The method consists in expressing the closure of the chain: Imagine the bar 12 subjected to the screw displacement which makes it align itself with 14 in the position 12′ (2′ is the known new position of axis 2); similarly, let 43′ be the position of 43 after a screw displacement [illegible] Now express that the [illegible]

[illegible]

dimensions [illegible]

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DIMENTBERG, F. M.

O poperechnykh kolebaniiakh sterzhnia s raspredelennoi massoi pri nalichii soprotivleniia. (Prikladnaia matematika i mekhanika, 1949, v. 13, no. 1, p. 51-54)

Title tr.: On the transverse oscillations of a heavy bar with distributed mass when resistance is present.

QA801.P7 1949

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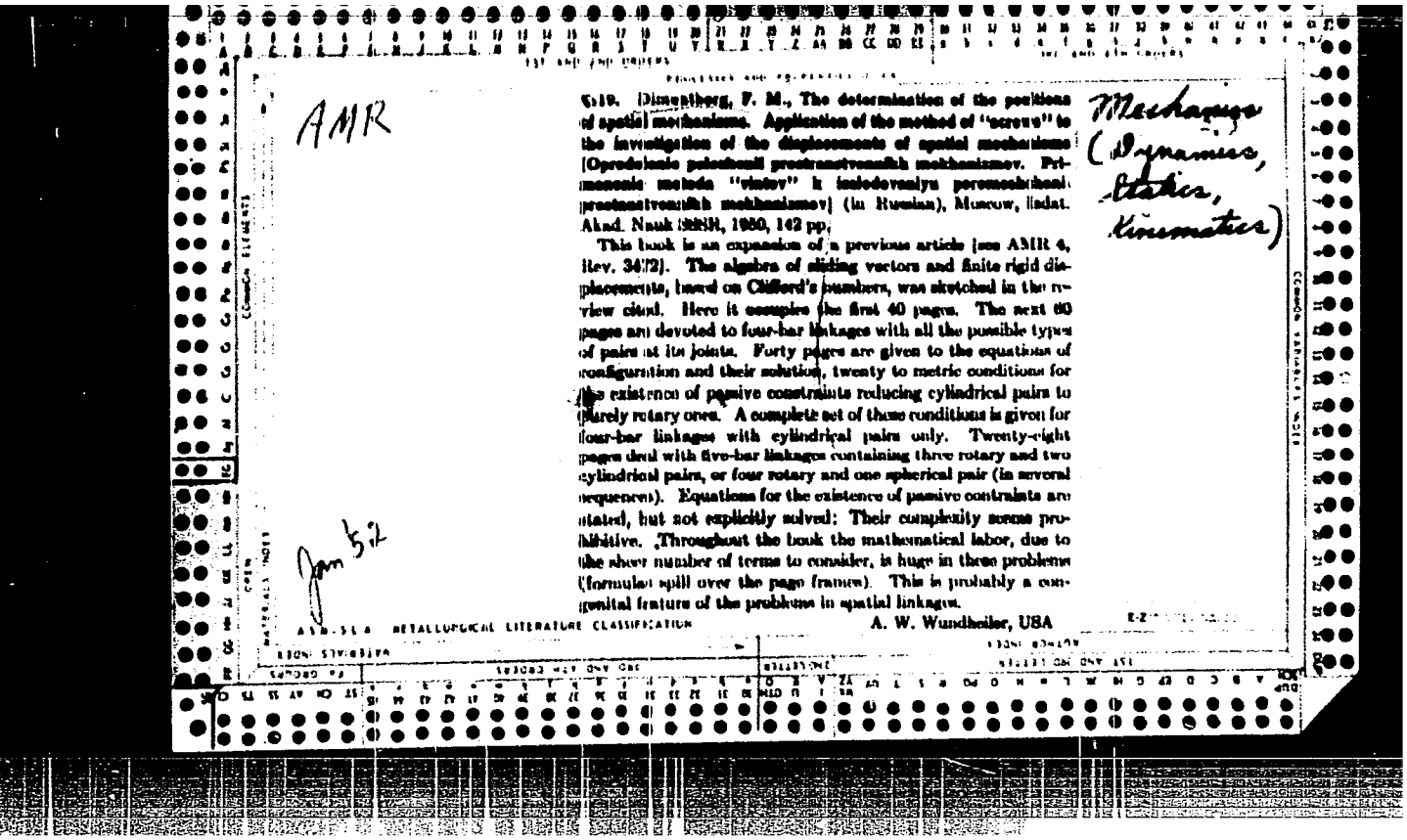

AMR

Mechanics (Dynamics, Statics, Kinematics)

6319. Dimentberg, F. M., The determination of the positions of spatial mechanisms. Application of the method of "screws" to the investigation of the displacements of spatial mechanisms [Opredelenie polozhenii prostranstvennykh mekhanizmov. Primenenie metoda "vintov" k issledovaniyu peremeshchenii prostranstvennykh mekhanizmov] (in Russian), Moscow, Izdat. Akad. Nauk SSSR, 1950, 142 pp.

This book is an expansion of a previous article [see AMR 4, Rev. 3472]. The algebra of sliding vectors and finite rigid displacements, based on Clifford's numbers, was sketched in the review cited. Here it occupies the first 40 pages. The next 60 pages are devoted to four-bar linkages with all the possible types of pairs at its joints. Forty pages are given to the equations of configuration and their solution, twenty to metric conditions for the existence of passive constraints reducing cylindrical pairs to purely rotary ones. A complete set of these conditions is given for four-bar linkages with cylindrical pairs only. Twenty-eight pages deal with five-bar linkages containing three rotary and two cylindrical pairs, or four rotary and one spherical pair (in several sequences). Equations for the existence of passive constraints are stated, but not explicitly solved: Their complexity seems prohibitive. Throughout the book the mathematical labor, due to the sheer number of terms to consider, is huge in these problems (formulae spill over the page frames). This is probably a congenital feature of the problems in spatial linkages.

A. W. Wundheiler, USA

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

AID 545 - I

Poperechnyye kolebaniya vrashchayushchegosya vala s diskami pri nalichii sporotivleniya treniya

phenomenon of transverse vibrations of turbine shafts provided with disks and having a marked elasticity, on the assumption that the supports are sufficiently rigid. The work presents a precise dynamic computation of a revolving elastic shaft, and the equations of its free and forced transverse vibrations. These are consecutively formulated: 1) with one disk in the center, 2) with a disk, the plane of which has a vibrating movement, 3) with several disks. In stating these three different cases the author discusses fundamental conceptions; interior and exterior frictions; stability of vibrations; a shaft having different rigidity in two directions; the effect of elasticity; gyroscopic action of a rotating disk; cantilever shaft with a disk at the end; and forced and free vibrations. The text includes numerous formulae, 24 diagrams and graphs.

No. of References: Total 11, 1935-1949, 6 Russian, 5 American
Facilities: None

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F.M.

PHASE I TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 546 - I

BOOK Call No.: AF620011

Author: DIMENTBERG, F. M.
Full Title: TRANSVERSE VIBRATIONS OF A REVOLVING SHAFT WITH THICKLY MOUNTED DISKS [See: Orig. Agency and Purpose]
Transliterated Title: Poperechnyye kolebaniya vrashchayushchegosya vala s gusto nasazhennymi diskami

PUBLISHING DATA
Originating Agency: Academy of Sciences, USSR. Institute of Machine Design. Poperechnyye kolebaniya i kriticheskiye skorosti (Transverse Vibrations and Critical Speeds). First Collection
Publishing House: Academy of Sciences, USSR
Date: 1951 No. pp.: 22 (247-268) No. of copies: 3,000
Editorial Staff
Responsible Editor: Serensen, S. V., Active Member, Academy of Sciences, Ukrainian S.S.R.

PURPOSE: This work is one of the seven (AID 540 - 546) which were discussed in a seminar on vibrations in the Institute of Machine Design, and is reprinted for its practical interest.

TEXT DATA
Coverage: The paper discusses the determination of frequencies of natural transverse vibrations of a revolving shaft with mounted

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

Poperechnyye kolebaniya vrashchayushchegosya vala s gusto nasazhennymi diskami AID 546 - I

disks, when their effect on the shaft may be considered continuous all along the shaft's length. The critical RPM of a revolving shaft does not fully explain the innumerable critical resonance states of the shaft. The author offers and solves a more general problem: that of the determination of natural transverse vibrations of a shaft as a function of the velocity of its rotation. He assumes an infinite number of disks mounted on the shaft, with a continuous distribution of the masses of the disks and their gyroscopic action and states that even in the case of variable sizes of the disks, when the calculations of frequencies become more complicated, the qualitative character of his solution remains the same. He discusses a shaft of a round cross-section and a shaft having unequal bending rigidities in two main directions. He takes into consideration the effect of the weight of the shaft, and the effect of an unbalanced shaft, and finally works out equations for natural vibrations deducing them from differential equations formulated by him. The paper includes 61 formulae, 6 diagrams and graphs.

No. of References: Two Russian, 1938-1940, 1 German, 1920 and 1 American, 1945

Facilities: None

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F.M.

BABKIN, S.I., kandidat tekhnicheskikh nauk; BALAKSHIN, B.S., professor, doktor tekhnicheskikh nauk; BEYZEL'MAN, R.D., inzhener; BELYAYEV, V.N., kandidat tekhnicheskikh nauk; BIRGER, I.A., kandidat tekhnicheskikh nauk; BOGUSLAVSKIY, P.Ye., kandidat tekhniceskikh nauk; BOROVICH, L.S., kandidat tekhnicheskikh nauk; VOL'MIR, A.S., professor, doktor tekhnicheskikh nauk; GONIKBERG, Yu.M., inzhener; GORODETSKIY, I.Ye., professor, doktor tekhnicheskikh nauk; GORDON, V.O., professor; DIMENTBERG, F.M., kandidat tekhnicheskikh nauk; DOSCHATOV, V.V., inzhener; IVANOV, A.G., kandidat tekhnicheskikh nauk; KIRASOSHVILI, R.S., professor; KODNIR, D.S., kandidat tekhnicheskikh nauk; KOLOMIYTSEV, A.A., kandidat tekhnicheskikh nauk; KRUTIKOV, I.P., kandidat tekhnicheskikh nauk; KUSHUL', M.Ya., kandidat tekhnicheskikh nauk; LEVENSON, Ye.M., inzhener; MAZYRIN, I.V., inzhener; MALININ, N.N., kandidat tekhnicheskikh nauk; MARTYNOV, A.D., kandidat tekhnicheskikh nauk; NIBERG, N.Ya., kandidat tekhnicheskikh nauk; NIKOLAYEV, G.A., professor, doktor tekhnicheskikh nauk; PETRUSEVICH, A.I., doktor tekhnicheskikh nauk; POZDNYAKOV, S.N., dotsent; PONAMOREV, S.D., professor, doktor tekhnicheskikh nauk; PRIGOROVSKIY, N.I., professor, doktor tekhnicheskikh nauk; PRONIN, B.A., kandidat tekhnicheskikh nauk; RESHETOV, D.N., professor, doktor tekhnicheskikh nauk; SATEL', E.A., professor, doktor tekhnicheskikh nauk; SERENSEN, S.V.; SLOBODKIN, M.S., inzhener; SPITSYN, N.A., professor, doktor tekhnicheskikh nauk; STOLBIN, G.B., kandidat tekhnicheskikh nauk; TAYTS, B.A., kandidat tekhnicheskikh nauk; TETEL'BAUM, I.M., kandidat tekhnicheskikh nauk; UMANSKIY, A.A., professor, doktor tekhnicheskikh nauk; FEODOS'YEV, V.I., professor, doktor tekhnicheskikh nauk;

(Continued on next card)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

BABKIN, S.I.--- (continued) Card 2.
KHAYT, D.M., kandidat tekhnicheskikh nauk; LYDINOV, V.Ya., kandidat tekhnicheskikh nauk; SHRAYBER, M.M., inzhener, nauchnyy redaktor; SHEDROV, V.S., kandidat tekhnicheskikh nauk, nauchnyy redaktor; TSVETKOV, A.P., dotsent, nauchnyy redaktor; SLEZNIKOV, G.I., inzhener, nauchnyy redaktor; MARKUS, M.Ye., inzhener, nauchnyy redaktor; KARGANOV, V.G., inzhener, nauchnyy redaktor; ACHERKAN, N.S., doktor tekhnicheskikh nauk, professor, redaktor; SOKOLOVA, T.F., tekhnicheskiy redaktor

[Manual of machinery manufacture] Spravochnik mashinostroitelia; v trekh tomakh. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry. Vol.3. 1951 1098 p. (MLRA 10:8)

1. Deystvitel'nyy chlen Akademii nauk USSR (for Sorensen)
(Machinery)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F.M.

Effect of friction resistance on transverse vibrations of a rotating shaft with disks. Poper.koleb.i krit.skor. no.1:183-246 '51. (MLRA 7:4)

(Vibration) (Disks, Rotating) (Friction) (Shafts and shafting)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F. M.

"Transversal Oscillation of the Rotating Shaft with Disks, Taking into Consideration Friction," a scientific report included in the table of contents of Transversal Oscillations and Critical Speeds, a journal of the Machine Construction Institute of the Soviet Academy of Science, 1951 No 1, 247-268.
Poper. Koleb, i krit. skor. /

At first the author examines a shaft with solid fixed bearings on both ends and an eccentric flyin flywheel mass arrabged in the middle of the shaft. Then he goes over to the case where both bearings are spring supported. Finally the shaft with fly-wheel mass is suspended in an inactive frame which is also spring supported.

XLVIII

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F.M.

Transverse vibration of a rotating shaft having varying principal sectional moment of inertia. Poper.kolebi krit.skor. no.2:65-106 '53.
(MLRA 7:4)
(Moments of inertia) (Shafts and shafting)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F.M.

Effect of shearing stress on transverse vibration of a rotating shaft with disks distributed along its length. Poper.koleb.i krit. skor. no.2:107-120 '53. (MLRA 7:4)
(Shafts and shafting) (Disks, Rotating) (Vibration)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F.M. (Moskva).

Stability of flexible spindles in the presence of hysteresis in the material. Inzh.sbor. 16:81-86 '53. (MLRA 7:3)

1. Institut mashinovedeniya Akademii nauk SSSR.
(Spindles (Machine-tools)) (Hysteresis)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

ANDREYEV, L.Ye., kandidat tekhnicheskikh nauk; BIDERMAN, V.L., kandidat tekhnicheskikh nauk; BOYARSHINOV, S.V., kandidat tekhnicheskikh nauk; VOL'MIR, A.S., doktor tekhnicheskikh nauk; DIMENTBERG, F.M. kandidat tekhnicheskikh nauk; ZASLAVSKIY, S.M., inzhener; KINASOSHVILI, R.S., doktor tekhnicheskikh nauk, professor; KOVALENKO, A.D.,; MAKUSHIN, V.M., kandidat tekhnicheskikh nauk MALININ, N.N., kandidat tekhnicheskikh nauk; PONOMAREV, S.D., doktor tekhnicheskikh nauk; PRIGOROVSKIY, N.I., doktor tekhnicheskikh nauk; TEYEL'BAUM, I.M., kandidat tekhnicheskikh nauk; UMANSKIY, A.A., doktor tekhnicheskikh nauk, professor; FEODOS'YEV, V.I., doktor tekhnicheskikh nauk; SKRINSKII, S.V., redaktor; TRAPEZIN, I.I., kandidat tekhnicheskikh nauk, redaktor; KARGANOV, V.G., inzhener, redaktor; SOKOLOVA, T.F., tekhnicheskiy redaktor.

[Mechanical engineer's manual; in 6 volumes] Spravochnik mashinostroitelia; v shesti tomakh. Izd.2-e, ispr. i dop. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry, Vol.3, 1955. 563 p.
(Mechanical engineering) (MLRA 8:12)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

USSR/Engineering - Strength of Materials FD-3022

Card 1/1 Pub. 41 - 6/15

Author : Vagapov, R. D., Dimentberg, F. M. and Serensen, S. V., Moscow

Title : Questions on the dynamic strength of turbogenerator rotors

Periodical : Izv. AN SSSR, Otd. Tekh. Nauk 9, 65-106, Sep 55

Abstract : Summarizes the results of experiments conducted in the Laboratory of Dynamic Strength, Institute of Machine Science, Acad Sci USSR. Studies the vibration stress in rotors operated at over 3000 rpm. Presents information on stress distribution in those parts of the rotor under greatest dynamic stress. Discusses rotor strength under the action of cyclic stress. Graphs, tables, diagrams, formulae. Twenty six references, 18 USSR.

Institution:

Submitted : June 7, 1955

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

Name	DIMENTBERG, Fedor Monas'yevich
Dissertation	Certain Problems concerning Bent Waves of rapidly Rotating Shafts
Degree	Doc Tech Sci
Affiliation	/not indicated/
Defense Date, Place	25 Jan 56, Council of Inst of Machine Building, Acad Sci USSR
Certification Date	15 Dec 56
Source	BMVO 7/57

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

SOV/124-57-3-3468

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 3, p 122 (USSR)

AUTHOR: Dimentberg, F. M.

TITLE: Stress Variation in an Elastic Shaft During Its Transition Through the Critical Velocity (Izmeneniye napryazheniy v gibkom vale pri perekhode cherez kriticheskuyu skorost')

PERIODICAL: V sb.: Kolebaniya v turbomashinakh. Moscow, AN SSSR, 1956, pp 21-48

ABSTRACT: A study is made of the transverse oscillations of an elastic shaft supported at both ends with an unbalanced disc mounted thereon rotating under constant angular acceleration. The mass of the shaft is not taken into consideration and the disc is considered to be mounted in the center of the span, which condition allows the author to ignore the gyroscopic effect. When there are no resistance forces present, the equations of the longitudinal oscillations set up for stationary coordinates coincide with the well-known equations for a system having one degree of freedom and are solved by means of Fresnel integrals. A steady-state regime of forced oscillations with an initial angular velocity is used to define the initial conditions. The solution is then

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Stress Variation in an Elastic Shaft (cont.)

transformed to a system of coordinates rotating with the shaft, which makes the calculation of flexural stresses simple. The cases of acceleration and coasting are studied separately. The variation of the torque moment during the transition through the critical velocity is found along with the deflection components for the stationary and for the rotating coordinates. Calculations were made for cases of both rigid and elastically-flexible supports (with different stiffness factors in two directions). It is pointed out that in case of elastically-flexible supports the variable component of the stresses increases. An approximate solution of the problem is given with due consideration of the resistance forces. The initial equations are originally set up under the assumption that the resistance is generated by internal friction. The circulatory terms are then droppped, i. e., the effect of internal friction is identified with the action of the external friction. The solution contains an exponential factor in the integrand expression and consequently is not reducible to the Fresnel-integral form. By reducing the interval of integration to smaller intervals, the exponential factor may be considered to be constant within that smaller range, and the approximate solution may then be expressed through a sum of Fresnel integrals. Diagrams of stress variations during transition through the critical velocity, as recorded experimentally on loop oscillographs, are given. Good agreement between theoretical and experimental results is noted.

Card 2/2

V. V. Bolotin

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

DIMENTBERG, F. M.

F. M. Dimentberg and S. G. Kislitsin, "The Application of Helical-Axis Calculations to the Analysis of Spatial Mechanisms."

paper presented at the 2nd All-Union Conf. on Fundamental Problems in the Theory of Machines and Mechanisms, Moscow, USSR, 24-28 March 1958.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

. Dimentberg, F.M.

AUTHOR: Tondl, A. (Prague). 24-1-3/26

TITLE: On the stability of a flexible shaft with one disc taking into consideration the effect of forces of internal and external damping and the effect of the weight of the disc. (Ob ustoychivosti gibkogo vala s odnim diskom pri deystvii sil vnutrennego i vneshnego treniy i vesa diska).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, No.1, pp. 21-25 (USSR).

ABSTRACT: The stability of a flexible shaft with a disc at the centre of the shaft, taking into consideration the effects of damping by internal and external friction, has been investigated by numerous authors. For instance, F. M. Dimentberg, (Refs. 1-3), has solved the non-linear problem without taking into consideration the weight of the disc. M. I. Chayevskiy (Refs.4 and 5) published experimental results relating to the influence of friction. In this paper the stability is investigated of a rotor, taking into consideration internal damping (caused by the material of the shaft itself) and external damping for a horizontal shaft, i.e. taking into consideration the effect of the weight of the disc. The movement of the

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

On the stability of a flexible shaft with one disc taking into consideration the effect of forces of internal and external damping and the effect of the weight of the disc.

disc is expressed first in terms of rotating coordinates of the system (ξ, μ) $(\xi + i\mu) = \xi$ (see Fig.1). Then, the Carthesian coordinates ξ, μ are substituted by polar coordinates ρ, φ (see Fig.2). The internal damping force P_t is expressed by a non-linear function of the speed and the deflection, Eq.(8); the vector of the force P_t is not considered as being generally coincident with the direction of the speed ξ. The result of the solution is the establishment of necessary and adequate conditions of stability of the movement expressed by the inequalities (19) and (20), whereby $\varkappa$ is the coefficient of external damping and δ_1 and δ_2 are respectively the coefficient of the radial and tangential components of the internal damping which are dependent on the sag of the shaft R. Ω is the frequency of the natural oscillations of the rotor and ω is the angular speed of rotation of the shaft. δ_2' is the derivation according to R of the coefficient δ_2. The inequality (19) is always fulfilled. If the inequality (23) is fulfilled, the movement of the rotor will be stable in

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

On the stability of a flexible shaft with one disc taking into consideration the effect of forces of internal and external damping and the effect of the weight of the disc.

the entire range of ω. However, if the inequality (23) is not fulfilled, an upper limit of stable ω values will exist. The tangential component of the internal damping reduces this limit, whilst the radial component of the internal damping and the external component increase this limit.

$$\varkappa\Omega^2\left(\varkappa+\frac{\delta_1}{R\omega}\right)-\frac{1}{R}\delta_2\delta_2'>0 \qquad (19)$$

$$\omega<\frac{\varkappa\Omega^2\delta_1}{\delta_1\delta_2'+\varkappa^2R\Omega^2} \qquad (20)$$

$$D^2>\frac{h_2}{cR}\,\frac{h_2'}{c} \qquad (23)$$

There are 3 figures, 6 figures - 5 Russian, 1 English.

SUBMITTED: July 15, 1957.

AVAILABLE: Library of Congress.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410410008-3

AUTHOR: Dimentberg, F. M. (Moscow) SOV/24-58-5-16/31

TITLE: Phase-Plane Representation of the Motion of a System with Two Degrees of Freedom (Kompleksnoye predstavleniye na fazovoy ploskosti dvizheniya sistemy s dvumya stepenyami svobody)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, Nr 5, pp 97-99 (USSR)

ABSTRACT: The four-dimensional phase space (of coordinates x, $\dot{x}$, y, $\dot{y}$) is represented on a plane via the coordinates $x + \omega\dot{x}$, $y + \omega\dot{y}$, where ω is an operator such that $\omega^2 = 0$; Plucker coordinates are used. The results are those to be expected from applying Seiliger's theorems to this case. There are 7 figures and 3 Soviet references.

SUBMITTED: January 15, 1958

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GUSAROV, A.A., kand. tekhn. nauk; DIMENTBERG, F.M., doktor tekhn. nauk.

Balancing flexible shafts. Vest. mash. 39 no.1:47-53 Ja '58.
(MIRA 12:1)

(Balancing of machinery)

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DIMENTBERG, F.M.

25(2); 24(6) PHASE I BOOK EXPLOITATION SOV/2591

Akademiya nauk SSSR. Institut mashinovedeniya

Kolebaniya v turbomashinakh; sbornik statey (Vibrations in Turbomachines; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 117 p. Errata slip inserted. 2,300 copies printed.

Resp. Ed.: S. V. Serensen, Academician, Academy of Sciences, USSR; Ed. of Publishing House: Ya. A. Klimovitskiy; Tech. Ed.: V. V. Volkova.

PURPOSE: This collection of articles is intended for scientific research workers, engineers, and designers inthe field of turbomachinery.

COVERAGE: This collection of articles deals with vibrations in turbomachinery. The following topics are discussed: vibrations and stresses in the rotor and bearings of a turbogenerator, vibrations and stability of beams, flexural vibrations of a rotating shaft, whirling speeds of a flexible rotor with two unbalanced masses, acceleration through resonance of a nonlinear system, whirling speed and clearance in bearings, dynamic stresses in blades of an axial compressor, and damping of vibrations. No personalities are mentioned. References follow several of the articles.

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