

GRZYWACZEWSKI, Z., mgr., inz.

Launching of the floating dock for the Stettin ship repair yard.
Bud okretowe Warszawa 6 no.12:375 '61.

1. Redaktor dzialowy miesiecznika "Budownictwo Okretowe".

(Stettin—Docks)

GRZYWACZEWSKI, Zbigniew, mgr., inż.

The outlook for technical progress in the shipbuilding industry.
Przegl techn 81 no.17:10-11 '60.

GRZYWACZEWSKI, Zbigniew, mgr.inz.

Ten years of activity of the Commission of Marine Welfare and
Safety. Bud okretowe Warszawa 7 no.8:252-255 Ag '62.

1. Pzewodniczacy Okretowej Komisji Bytowej i Ochrony Pracy, Gdansk.

GRZYWACZEWSKI, Zbigniew, mgr.inz. (Gdansk)

A floating dock of 5500 t. for the Ship Repair Yard in Szczecin.
Bud okretowe Warszawa 7 no.8:255-258 Ag '62.

GRZYWACZEWSKI, Zbigniew, mgr inz.

Conference of the Food and Agriculture Organization of the
United Nations in Danzig on the stability of fishing vessels.
Bud okretowe Warszawa 8 no.12:407-408 D'63.

GRZYWACZEWSKI, Zbigniew, mgr inż.

Problem of protection against fire hazards of vessels and shipyards.
Bud okretowe Warszawa 9 no.10:351-354 '64

1. Marine Institute, Gdansk.

RUDZINSKI, Jerzy, mgr inz.; GRZYWACZEWSKI, Zbigniew, mgr inz.; BORYSIEWICZ,
Tadeusz

New books. Bud okretowe Warszawa 9 no.12:447-449 D '64.

GRZYWACZEWSKI, Zbigniew, mgr inż.

Present state and shortcomings of the classification of ships.
Bud okretowe Warszawa 10 no.3:103-105 Mr '65.

1. Marine Institute, Gdansk.

GRZYWACZEWSKI, Zbigniew, age 14.

Outline of the trip to succeed M/S Batory. Morzy techn 18
no.4:3-6 Ap '65.

Grzywak, A.

28. METHOD OF ANALYSIS OF DYNAMIC STRESSES IN CONVEYOR BELTS AND CHAINS.
Grzywak, A. and Sayja, S. (Przegł. Corn. (Din. Rev., Stalingrad), Sept. 1955,
Vol. 11, 319-324). Mathematical relationships characterizing the movement of
conveyors whose transmission is coupled, without any possibility of slipping,
with a closed asynchronous motor are established. The values for dynamic
forces and accelerations occurring during movement of the conveyor are
determined by analysis of theoretical curves representing the relationship
between motor revolutions and time. Practical results of tests on conveyors
carried out underground are compared with the theoretically established values.
(L).

N.C.B.

GREYWAK, A.

GREYWAK, A. Testing the driving machinery for belt conveyers. Biuletyn. p. 9
No. 11, Vol. 11, Nov. 1955. PRZEGLAD GORNICZY. Stalinogrod, Poland

SOURCE: East European Accessions List (FEAL) LC VOL. 5, No. 6 June 1956

GRZYWAK, A.; SZYJA, S.

"Equipment for starting mine conveyers."

p. 53 (Przegląd Gorniczy) Vol. 12, no. 2, Feb. 1956
Katowice, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

GRZYMAK, A.

LO-54 speed controller for automatization of belt conveyers. Biuletyn Mech.

p. 7 (Przegląd Gorniczy. Vol. 12, no. 7/8, July/Aug. 1956. Katowice, Poland)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

GRZYNAK, A.

Automatization of belt conveyers.

p. 287 (Przegląd Gorniczy. Vol. 12, no. 7/8, July/Aug. 1956. Katowice, Poland)

Monthly Index of East European Accessions (EEAI) IC. Vol. 7, no. 2,
February 1958

GRZYMAK, A; SZYJA, S.

The influence of electric feeders on the output of electric motors in mines.
p. 194.

PRZEGLAD GORNICZY. Katowice, Poland, Vol. 5, no. 4, Apr. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 9, September, 1959.
Uncl.

SZYJA, Stanislaw, mgr., inz.; GRZYWAK, Andrzej, dr., inz.

Problems connected with mining electrical drives and feeding
transformers. Przegl gorn 17 no.11:Suppl.: Biuletyn Zakl
Konstr. Mech PW 9 no.1:8-12 '61.

GRZYWAK, Andrzej

Modern system of remotely controlled mining machinery. Wiadom
gorn 12 no.6:198-202 Ja '61.

GRZYWAK, J.

GRZYWAK, J. Technical progress in the mechanization of assemblage by means of electric machines. p. 14. BUDOWNICTWO PRZEMYSŁOWE. Warszawa, Poland. Vol. 4, No. 11, Nov. 1955

SOURCE: East European Accessions List (EEAL) LC Vol. 5, No. 6, June 1956

GRZYNAK, J.

Technical progress in the mechanization of electric assembling. (To be contd.) p.9
BUDOWNICTWO PRZEMISLowe (Ministerstwo Budownictwa Przemysłowego) Warszawa
Vol. 5, no. 1, Jan. 1956

So. East European Accessions List

Vol. 5, No. 9

September 1956

GRZYWAK, J.

"Cold welding of copper rails with aluminum rails."

p. 154 (Gospodarka Ciepłna, Energetyka Przemysłowa) Vol. 5, no. 2, July/
Aug. 1957
Warsaw, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

GRZYWAK, Jerzy, mgr inz.

Cold bonding Cu-Al contacts. Rudy i metale 10 no.1:31-33 21 1965.

GRZYWAK, Teresa

Inheritance of the direct dimensions of the face and the morphological facial index in the light of the Frets concept. Prace zool no.8:43-53 '63 [publ. '64].

1. Institute of Anthropology of the Jagiellonian University, Krakow. Head: prof. dr Eugenia Stolyhwo.

GRZTWINSKI, Leszek

Mass invasion of humans by *Bdellonyssus bacoti* Hirst.
Wiadomosci parazyt., Warsz. 2 no.4:231-233 1956.

1. Z Wyzszej Szkoły Rolniczej we Wrocławiu.

(MITES,

liponyssus bacoti, infestation of humans (Pol))

GRZYWINSKI, Leszek (Wroclaw)

Internal parasites in fur animals in the western territories.
Wiadomosci parazyt., Warsz. 2 no.5 Suppl:155-156 1956.

1. Katedra Parazytologii i Chorob Inwazyjnych WSR.
(PARASITIC DISEASES, epidemiology,
in fur animals in Poland (Pol))

GRZYWINSKI, Leszek

Correlation between intestinal invasion and infection in fowl. Wiadomosci parazyt., Warsz. 4 no.5-6;591; Engl. transl. 592 1958.

1. Z Zakladu Parazytologii i Chorob Inwazyjnych WSR w Warszawie.
(SALMONELLA INFECTIONS, experimental,
gallinarum, relation to ascariasis in chickens (Pol))
(ASCARIASIS, experimental,
relation to Salmonella gallinarum infect. in chicks (Pol))

GRZYWINSKI, Leszek

Attempted application of a micro-precipitation reaction with
Filaria of the type Strongylus. Wiadomosci parazyt., Warsz. 6
no. 1: 27-29 '60.
(STRONGYLOIDIASIS diag.)

GRZYWINSKI, Leszek

Correlation between the experimental intestinal invasion and infection
in poultry. Acta parasit 8 no.8/20:255-277 Je '60. (NEAI 9:11)

1. Katedra Parazytologii i Chorob Inwazyjnych W.S.R. Wrocław.
(Poultry)

GRZYWINSKI, Leszek

Parasitological analysis of fecalia from excavations. Wiad. parazyt.
8 no.5:543-548 '62.

1. Katedra Parazytologii i Chorob Inwazyjnych WSR, Wroclaw.
(ARCHEOLOGY) (FECES) (PARASITIC DISEASES)

GKZYMINSKI, Levelek

Complement fixation tests in toxoplasmosis of dogs from Wrocław.
Wlad. parazyt. 10 no.4:383-384, '62

1. Katedra Parazytologii i Chorob Inwazyjnych Wydział Szkoły
Rolniczej, Wrocław.

GRZYWINSKI, Leszek; BOCHDALEK, Roman

Experimental toxoplasmosis in dogs. Wiad. parazyt. 10 no.4:
381-382 '64

1. Katedra Parazytologii i Chorob Inwazyjnych i Katedra
Epizootiologii Wyzszej Szkoły Rolniczej, Wrocław.

GRZYWINSKI, Leszek; BOCHDALEK, Roman

Experimental toxoplasmosis of cats. Wiad. parazyt. 11 no. 5:
453-465 ' 65.

1. Katedra Parazytologii i Chorob inwazyjnych i Katedra Epizootiologii Wyższej Szkoły Rolniczej, Wrocław.

GRZYWINSKI, WL.

POLAND/Chemical Technology. Chemical Products and Their Application. Leather. Fur. Gelatine. Tanning Materials. Industrial Proteins.

H-35

Abs Jour: Ref Zhur-Khim., No 2, 1959, 6954.

Author : Grzywinski, Wlodzimierz.

Inst :

Title : Artificial Face Layer of Polyamides on Chrome, Vegetable and Sulfochloride Tanned Hide Shreds. Parts I and II.

Orig Pub: Przegl. skovzany, 1956, 11, No 6, Biul. lab. koloryst., 1-4; No 12, Biul. lab. koloryst., 5-8.

Abstract: I. Experiments of using polyamides (stilon [transliteration from Russian]) for dressing shreds of hides by applying an artificial face to them are described. The method of modification of stilon by the introduction of alkoxymethyl groups into it by the action of alcohol

Card : 1/3

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POLAND/Chemical Technology. Chemical Products and Their Application. Leather. Fur. Gelatine. Tanning Materials. Industrial Proteins.

H-35

Abs Jour: Ref Zhur-Khim., No 2, 1959, 6954.

solution of CH_2O on the polymer dissolved in formic acid is presented. The adhesive properties of films are quite satisfactory for their application to the unpolished surface of shreds, but not to the polished pig leather, especially in its areas of close texture. A stilon film creates unlimited coloring possibilities to produce color shades to order, as well as a high gloss. - M. Lyuksenburg.

II. The method of application an artificial face layer of modified stilon to chrome, vegetable and sulfochloride tanned hide shreds is described. A physical-mechanical study showed that the shreds obtained possessed an in-

Card : 2/3

POL . .

Dust from cement kiln as a raw material for chemical industry. Roman Andrzejewski, Jan Grzywnowski, and Kazimierz Mikula (Akad. Górniczo-Hutniczej, Kraków, Poland). *Cement-Wapno-Gips* 11(20), 76-80(1965). The dust from cement kiln contains 7% K_2O and can be utilized directly as a K fertilizer, or as a mixed K and P fertilizer or for recovery of K_2SO_4 , or perhaps as a raw material for K_2CO_3 and Al_2O_3 . The finer the particles of dust the more K_2O and Al_2O_3 , and the less CaO , SiO_2 , and silicates they contain. From the finest particles, which can be obtained by a method of dry flotation, $KAlO_2$ can be leached out in an autoclave. $KAlO_2$ after reaction with CO_2 yields K_2CO_3 and Al_2O_3 . If the dust is recovered by the wet method, then this slurry is decanted and the aq. soln. concd. till K_2SO_4 (of 70% purity) crystallizes; the thick slurry is then returned for mixing with cement raw materials. The authors found that most of the dust originates from the cold end of the rotary kiln because it is not fully calcined. When the raw materials contained 0.02, the clinker contained only 0.02% K_2O (K_2O in clinker is deleterious anyway). Thus, approx. 1/3 of K was removed with dust. As Poland's production of cement is approx. 4,000,000 ton/year the amt. of K_2O removed with dust and wasted is 14,000 tons/year. At 1800-1850° K_2O (which is formed by dissec. at high temp. of K compds.) sublimates to colder parts of the kiln where it combines with CO_2 , SO_2 , SO_3 , and H_2O forming part of dust particles. A cement mill which might decide to recover K (e.g. by Polish patent 37502 which removes all K from clinker) may even use as a raw material volcanic tuffs which in Pilipowice, Poland contain K_2O 9.42, SiO_2 62.51, Al_2O_3 14.64, Fe_2O_3 3.89%, etc. P. J. Hendel...

GRZYWNOWICZ, Jan, inż.

Purification of waste gases from burning kilns for Portland clinker.
Cement wapno gips 16/26 no.8/9:251-256 '61.

1. Katedra Gospodarki Ciepłej Akademii Górniczo-Hutniczej, Krakow.

(Clinker brick)

GRZYWO-DABROWSKI, Wiktor

Polish medicolegal and related bibliography for 1951. Arch.med.
sad., Warszawa, 6:197-209 1955.

(BIBLIOGRAPHY
medicolegal in Poland)

GRZYWO-DABROWSKI, Wiktor; JUNDZILL, Krystyna

Polish neurological, neurosurgical and psychiatric literature
published in 1961. Neurol. neurochir. psychiat. pol. 13 no.3:
440-459 '63.

(NEUROLOGY) (NEUROSURGERY) (PSYCHIATRY)
(BIBLIOGRAPHY)

GSCHWINDT, Andras

Transistor receiver for 2 meters. Radiotechnika 15 no.1:23-
25 Ja '65.

GSCHWENDT, Ivan, inz.

Utilization of ash in road construction. Siln doprava 11
no.5:14-15 My '63.

1. Vyskumny ustav stavebnictva, Bratislava.

GSCHWENDT, Ivan, inz.

Hydrothermal conditions of roadbeds. Inz stavby 12 no.9:
396-399 S '64.

1. Research Institute of Engineering Construction, Bratislava.

GSCHWINDT, Andras (HA 8 WH)

QRM-filter for the reception of telegraphic signals.
Radiotechnika 13 no.4:135 Ap '63.

FERENCZ, Csaba; GSCHWINDT, Andras

Designing tuned transistor amplifiers. Radiotechnika 14 no.10:
362-364 0 '64.

GSZHWINDT, Andras

Transistor receiver for 2 meters. Pt. 1. Radiotechnika 14
no.12:466-467 D '64.

GSCHWINDT, Andras

Transistor oscillators. Pt.1. Radiotechnika 15 no.6:212-213
Je '65.

GSCHWINDT, Andreas (HA 8 WH)

Transistor oscillators. Pt.2. Radiotechnika 15 no.7:257-258
Jl '65.

GSELMAN, Janez

Work of the Posta, Telegraph, and Telephone Inspectorate
in the first year after its reorganization. PTT zbor 16
no.4:80-83 Ap '62.

DUBININ, V.B.; GSEL'NIKOVA, M.I.; RAZNATOVSKIY, I.M.

Discovery of the skin mite. *Dermatophogoides Scheremetewskiy Bogdanov*.
1864 in some human skin diseases [with summary in English] *Biul.MOIP*
Otd.biol. 61 no.3:43-50 My-Je '56. (MLRA 9:11)
(MITES) (SKIN--DISEASES)

GERWELOWA, H.; GSODAM, B.; HOLOGA, U.; SKALMOWSKI, T.; SZCZEPSKI, O.

Effect of stimulating substances with special reference to dibazol
after subsiding of acute symptoms. *Pediat. polska* 27 no. 7:835-844
July 1952. (CJML 22:4)

1. Of the Pediatric Clinic (Head--Prof. K. Jonscher, M. D.) of Pos-
nan Medical Academy and of Poznan Municipal Pediatric Hospital (Dir-
ector--M. Szenic, M. D.) and of Poznan Regional Infectious Hospital
(Director--O. Szczepski, M. D.).

GSODAM, B.

Psychological analysis of behavior in children in hospitals. Pediat.
polska 28 no.3:312-320 Mar 1953. (CML 24:5)

1. Of Poznan Regional Infectious Hospital (Director--O. Szczepski,
M.D.; Scientific Director--Prof. K. Jonscher, M.D.).

GEOMASHV, N. V., VIKHAROV, G. V., IANIN, V.P. AND GORAL, A. A.

"Flow and strain birefringence of solutions and gels of ethylcellulose,"
a paper presented at the 9th Congress on the Chemistry and Physics of High
Polymers, 28 Jan-2 Feb 57, Moscow, Research Inst. Physical Chem.

B-3,004,395

GSPAN, J.

"Consumption Of Energy In Traffic", p. 158. (Nova Proizvodnja, Vol. 4, no. 2, Apr., 1953, Ljubljana)

SO: Monthly List of East European Accessions, Vol. 2, No. 9, Library of Congress, September 1953, Uncl.

GSPAN, J.

TECHNOLOGY

GSPAN, J. Diesel engines in railroads. p. 9

Vol. 14, no. 12, Dec. 1958

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 3
March 1959 Unclass

ADAMSKI, Rafal; GSTIRNER, Fritz

Content of astringent substances in tannic raw materials and their
tinctures. Acta pol. pharm. 19 no.6:531-536 '62.

1. Z Instytutu Farmaceutycznego w Bonn Kierownik: prof. dr F. Gstirner.
(TANNINS) (CHEMISTRY, PHARMACEUTICAL)

HUNGARY/Chemistry of High Molecular Substances.

I

Abs Jour: Referat. Zhurnal Khimiya, No 21, 1958, 72806.

Author : Z. Gsu^uros, L. Geczy, M. Groszmann, K. Juhasz.

Inst :

Title : Rheological Study of Macromolecular Substances.
I. Comparison of Properties of Printer's Starch
and Gelatin Roller Masses Based on Their Theological
Behavior.

Orig Pub: Period. polytechn., 1, No 2, 105-129.

Abstract: The rheological properties of printer's roller
masses based on starch and gelatin were studied.
The measurements were carried out with a Heppler
consistometer. The highest and the lowest points
of the flow curve, the viscosity and the elasticity
of used masses were determined. Their rheological

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HUNGARY/Chemistry of High Molecular Substances.

I

Abs Jour: Referat. Zhurnal Khimiya, No 21, 1958, 72806.

classification was carried out. The flow curves of both the substances follow the equation (Herschel, Bulkley, Kolloid-Z., 1926, 39, 291) with the value of n less than 1 in the case of gelatin and more than 1 in the case of starch. The consistency of gelatin masses changes more with the temperature changes than the consistency of starch masses. The connection of the apparent viscosity of masses with the shearing stress was investigated, and the phenomenon of dilatancy was established in the case of starch masses. The dependence of elastic properties of these masses on the temperature was also studied. It was found that starch masses are harder than the gelatin ones. The starch masses have plasto-elastic properties at temperatures below 40° and visco-elastic properties at temperatures above

Card : 2/3

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GUAKE, L. K.

GUAKE, L. K. (Assistant L'vov Veterinarno-Zootechnical Institute.) On pathological anatomy of infectious catarrh of the respiratory tracts in cattle.

So: Veterinariya; 30; 11; November 1953; Uncl.
TABCON

L 12296-63

S/081/63/000/005/053/075

AUTHOR: Panchenkov, G. M. and Guankhua, Ya. 44

TITLE: The kinetics of coking on alumo-silicate catalysts in cracking of petroleum fractions and hydrocarbons

PERIODICAL: Referativnyy zhurnal, Khimiya, no. 5, 1963, 501, abstract 5P159
(Kataliz. v. vyssh. shkole. Tr. I. Mezhevuz. soveschaniya po katalizu., no. 1, part I, 1962, 285-289)

TEXT: The amount of coke collected on alumo-silicate catalyst was determined (content: Al_2O_3 14.01%, SiO_2 84.66%; surface 305 m^2/g) at various intervals of time (1 - 300 min) in the cracking of kerosene gas oil fractions, cetane and decalin in the 430-500° C interval. According to experimental data, a kinetic equation was developed for coke formation, by means of which it was possible to calculate the active area of the surface of the catalysts. The latter appeared to be dependent on the nature of the converted molecules and the temperature and was found to be equal to 9.7, 6.8 and 4.1% of the total surface at 450° C for the indicated substances. M. Mishchenko.

[Abstractor's note: Complete translation]

Card 1/1

GUARARI, E.V., inzh.

Water pump gland seals of high-speed diesel engines.

Energomashinostroenie 7 no. 1:38-40 Ap '61. (MIRA 14:7)

(Marine diesel engines)

GUARMATHY, Ferenc, Dr.

Postoperative mortality during 12 years (1943-1955). Magy. sebesszt
10 no.2-3:191-206 Apr-June 57.

1. A Janos Korhas Urologiai Sebesszt Osztalyanak koslemengye Foarvos:
Noszkay Aurel dr.

(UROGENITAL SYSTEM, surg.
postop. mortal. (Hun))

GUARMATI, B.
HUNGARY/Atomic and Molecular Physics - Physics of the Molecule

D-2

Abs Jour : Referat Zhur - Fizika, No 1, 1958, 680

Author : Gaspar, R. Koltay - Guarmati, B.

Inst : Kossuth Lajos University, Debrecen, Hungary.

Title : New Investigation of the H_2^+ Molecule-Ion.

Orig Pub : Acta phys. Acad. sci. hung., 1957, 7, No 1, 175-179

Abstract : The author proposes to consider the problem of the molecule-ion H_2^+ , using the eigenfunctions with variable center. The calculations are made with eigenfunctions of the Heitler-London type (Finkelstein B.N., Horowitz G.E., Z. Physik, 48, 118, 1928) and of the James type (James H.M., Journal of Chemical Physics, 3, 9, 1935). The Hamiltonian is $H = -(1/2) \Delta - 1/r_1 - 1/r_2 + 1/R$. The exchange integral for three centers

Card 1/2

64/84/17, 3
ZANFIR, C.; GUARU, C., Dr.; NICH, E., Dr.; TEODORECU, C., Dr.

Diagnosis of pericardial cystic formations. Med. int., Bucur. 9 no.5:
667-685 May 57.

1. Lucrare efectuata in Serviciul medical I si Serviciul radiologic al
Spitalului milita central, Bucuresti.

(PERICARDIUM, cysts
differ. diag. & case reports)

GUASK, A.A.

Moscow State U imeni M.V. Lomonosov. Mechanics and Mathematics Faculty

GUASK, A.A.: "On the history of development of the theory of the best approximation of functions." Moscow State U imeni M.V. Lomonosov. Mechanics and Mathematics Faculty. Moscow, 1956.
(Dissertation for the Degree of Candidate in Physicomathematical Sciences)

SO: Knizhnaya Letopis', No. 20, 1956

S/181/62/004/006/039/051
B108/B138

AUTHOR: Guba, A. I.

TITLE: Angular energy distribution of secondary electrons in
secondary electron emission

PERIODICAL: Fizika tverdogo tela, v. 4, no. 6, 1962, 1632-1635

TEXT: The transfer of medium-energy electrons (~ 100 ev) is investigated theoretically, assuming that the energy losses of the secondary electrons are due to Rutherford scattering. Good agreement with experimental data is obtained if the behavior of the secondary electrons inside the metal is considered as a cascade process (wide angle and back scattering). There are 2 figures. ✓

ASSOCIATION: Dnepropetrovskiy gosudarstvennyy universitet
(Dnepropetrovsk State University)

SUBMITTED: June 20, 1961 (initially)
February 21, 1962 (after revision.)

Card 1/1

ACCESSION NR: AR4014773

S/0058/63/000/012/H041/H041

SOURCE: RZh. Fizika, Abs. 12Zh275

AUTHOR: Guba, A. I.

TITLE: Concerning the energy-angle distribution of secondary electrons in secondary electron emission

CITED SOURCE: Nauchn. zap. Dnepropetr. un-t, v. 77, 1962, 37-44

TOPIC TAGS: electron emission, secondary electron emission, cascade electron emission, electron emission from metal, spherical harmonics, Mellin transform, internal secondary electron distribution, external secondary electron distribution

TRANSLATION: A modified theory is presented for the secondary cascade of electrons produced by initially excited secondary electrons (SE) of 100 eV energy. The method of spherical harmonics with use

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ACCESSION NR: AR4014773

of Mellin transforms yields a solution for the Boltzmann kinetic equation, in which the Streitwolf excitation function and the Rutherford scattering cross section of the SE are taken. The solution is obtained for an infinite medium, and the zeroth and second spherical harmonics of the distribution function are obtained. It is shown that the internal and external SE energy-angle distribution obtained with the new scattering function agrees with the experimental data: the internal SE are distributed almost isotropically in the 1--40 eV region, while the external energy-angle distribution of these electrons satisfies the cosine law with only slight deviations where the electrons leave the metal at large angles. A. Ostroukhov.

DATE ACQ: 24Jan64

SUB CODE: PH

ENCL: 00

Card 2/2

MITSKAN, I.I., Inzh.; GUBA, A.I., Inzh.

Pack cutting with low-pressure oxygen. Svar. proizv. 12:36-37
D '63. (MIRA 18:9)

I. Nikolayevskiy sudostroitel'nyy zavod im. I.I.Nosenko.

GUBA, A.M., inzh.; VETUKHOV, Ye.A., kand.tekhn.nauk

Mechanized center for the processing of freight documents. Zhel.
dor.transp.44 no.3:89-90 Mr '62. (MIRA 15:3)
(Bruxelles--Railroads--Station service)

GUBA, A.N., inzh.

Single-unit 4000 h.p. diesel locomotive with hydraulic
transmission. Elek. i tepl. tiaga 5 no.12:42-43 D '61. (MIRA 15:1)
(Diesel locomotives)
(Oil hydraulic machinery)

GUBA, A.N., inzh.

Railroad equipment at the French National Exhibition in Moscow.

Zhel.-dor.transp. 43 no.9:76-79 S '61. (MIRA 14:8)

(France--Railroads--Equipment)

(Moscow--Exhibitions)

AL'BOXHA V.P.; GUBA, A.Ya.; ZELENOV, A.B., kand.tekhn.nauk; KOKOSHNIKOV, G.A.

Noncontact gas-air ratio controller in the soaking pits of a
blooming. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch.i
tekh.inform. 16 no.8:10-12 '63. (MIRA 16:10)

GUBA, Bela

Standardization results in making tools for cold pressure
chamber casting. Finommechanika 2 no.5:157-159 My '63.

1. GANZ Arammerogyar.

ca

Observations on myosin and actomyosin. F. Gulyas, *Studies Inst. Med. Chem., Univ. Szeged, Hung.* 3: 417 (1943).--Ext. of rabbit muscle showed little activity (cf. Szent-Györgyi, *C.A.* 40, 20041) in the first 15 min. of extn.; afterwards the activity rose rapidly. Ext. of pigeon-breast muscle behaved similarly, both showing 120% active myosin values after 3 hrs. extn. Activity of frog-muscle ext. began with a steep rise and remained unchanged afterwards. Activity of the ext. of muscle of *Ameiurus nebulosus* rose very quickly, reaching 120% within 20 min. Ext. of muscle of other fish, *Esox lucius*, behaved similarly. This might explain the easy digestibility of fish meat. Also the viscosities of myosins of different activity were measured in solns. of various KCl concns. with and without addn. of adenosinetriphosphoric acid. High KCl concns. had the same effects as adenosinetriphosphoric acid, i.e., were capable of dissociating actomyosin. The less actin the actomyosin contained, the less KCl was needed for the dissociation. The measurement of activity of actomyosins of low actin contents is advantageous at low KCl concns. and at lower pH values. The KCl concns. at which the actomyosin dissociates without adenosinetriphosphoric acid plotted against the activities of actomyosin give a straight line. István Finály.

ASM-3LA METALLURGICAL LITERATURE CLASSIFICATION

FROM SOURCE

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ca

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Extraction of myosin. P. Guba and F. B. Straub, *Studies Inst. Med. Chem., Univ. Szeged, Hung.* 3, 40-8 (1933). - Extn. of rabbit muscle with salt solns. gives actomyosin of varying activity. The method of mincing, the pH value, salt concn., and time of extn. influence the amount and activity of the prepn. The extn. of coarsely minced rabbit muscle for 10 min. at 0° with 3 vols. of a soln. consisting of 0.15 M K phosphate buffer of pH 6.5 and 0.3 M KCl gives actomyosin of 3% activity. This conclusion was reached after a great no. of expts. - 1 F

ASM-SEA METALLURGICAL LITERATURE CLASSIFICATION

RECORD NUMBER

RECORD NUMBER

ca

The Viscosity of myosin. F. Cuba and P. B. Straub.
Studies Inst. Med. Chem., Univ. Szeged, Hung. 3, 40-50
(1943).—Viscosity values of myosin, detd. formerly,
seem to be anomalous owing to impurity of former myosin
preps. Twice-recrystd. myosin was used to obtain re-
liable new data. The viscosity was measured at 0° in
0.4 M KCl soln. buffered by veronal-acetate to pH 7.0.
The values obtained show that the viscosity of myosin is
not anomalous; values of dil. solns. were proportional to
their myosin content.

István Fényes

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2447

GUBA, F.

Institute of Biochemistry, University of Budapest Nature of Myosin Nature 1947,
159/4032 (194)

Myosin is a complex system of substances, although it behaves as a homogeneous substance on recrystallization. It consists of a skeleton to which numerous protein-like substances, known as 'protins' are adsorbed. These protins are involved in various reactions of myosin and have been named accordingly. They can be removed from the skeletal substance which appears to denature. On re-adsorption of the protins reactivation occurs. Not only does this skeletal substance adsorb protins, but also different anions, cations, adenosine triphosphate and other substances. Only the full system is capable of enzymic reaction and contraction, each part being by itself inactive. Finch - Birmingham

Section II Vol 1.1 Jan.--Jun. 48 No. 1--6

TEST AND TING ORDERS		PROCESSING AND PROPERTIES INDEX	
CA The reducing properties of fibrinogen. The role of SH groups in the clotting of fibrinogen. D. Bagdy, E. Guba, L. Lovász, and R. Mithályi. <i>Hung. Acta Physiol.</i> 1, 197-210(1948).--No SH groups could be detected in solns. of fibrinogen. Fibrinogen clotted normally after treatments by oxidizing agents which surely would have oxidized any SH groups present or after a treatment with chloroacetophenone. If the no. of SH groups were so low as to make detection by chem. methods impossible, they probably have no role at all in the clotting procedure. 21 references. Istvan Fintly		Ha	
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION			

C.A.

The effect of halide ions on F actin. Ferenc Gruba (Biochem. Inst., Budapest). *Kisérlet Orvostudomány* 1, 158-6 (1950); cf. C.I. 44, 3835b. Rabbit muscle was minced, extd. with acid KCl-phosphate soln., filtered, the solid substance washed with distd. water, filtered through cloth, suspended in 5 vols. of 0.4% NaHCO₃, let stand at room temp. for 30 min., pressed through cloth, stored overnight at -12°, suspended in an equal vol. of acetone, filtered through cloth, suspended again for 10 min. in an equal vol. of acetone, and filtered through cloth. Actin soln. extd. from dry muscles with distd. water contained 7 mg./ml. globular actin. After addn. of KCl, KBr, or KI, the qual. flow birefringence and viscosity were detd., both instantly and 30 min. after addn. of the halides. Both birefringence and viscosity diminished with increasing halide concns.; the effect was strongest in the presence of iodide. The investigated halides in 0.1 M concn. polymerized actin; when applied in higher concns., actin was decompd. When the halide salts were removed by dialysis, actin recovered its former activity, except after addn. of iodide, where the change was irreversible. István Flódy

C. A.

114

Colorimetric determination of the sulfhydryl groups of myosin, actin, and actomyosin. Ferenc Gulba (Biochem. Inst., Budapest). *Kisbites Orvostudomány* 1, 171-6 (1950).--The bromacetophenone method shows that 17.6 kg. myosin and 30 kg. actin contain 1 mole SH groups. The amts. of bromacetophenone bound by 1 g. myosin, actin, myosin:actin mixt. 5:1, myosin:actin mixt. 2.5:1.0, myosin:actin mixt. 2.5:1.0 in the presence of ATP, myosin:actin mixt. 2.5:1.0 boiled, were, resp., equiv. to 57, 9.6, 41, 9.5, 27, and 56 millimoles SH. Upon formation of actomyosin SH groups mostly disappear, whereas in the presence of ATP the SH groups increase in actomyosin. Heat treatment denatures actomyosin and frees its SH groups. 1. Finally

C. A.

114

The contraction of actomyosin in the presence of adenosinediphosphate. Keryse Gulay (Biochem. Inst., Budapest, Hung.). *Kisérlet Orvostudomány* 2, 16-20 (1950). Actomyosin prepd. from cryst. myosin was not pptd. by adenosinediphosphate (1) in a salt concn. at which a ppt. was formed with 1. When dialyzed muscle ext. was added, a ppt. was formed with adenosinetriphosphate. This effect is caused by a thermostable protein resistant to acids and isolated by the following process: Fresh muscles of rabbit were minced, suspended in an equal amt. of water, stirred, stored at 0° for 12 hrs., filtered through linen cloth, centrifuged, the liquid adjusted at 0° to pH 1.0 with concd. HCl, neutralized with KOH, the ppt. centrifuged, the clear liquid mixed at 0° with an equal vol. of acetone at -15°, and quickly centrifuged. The ppt. is dissolved in 0° water, centrifuged, the liquid 50% satd. with solid (NH₄)₂SO₄, the ppt. removed by centrifuging, and the liquid satd. to 75% with (NH₄)₂SO₄, should a ppt. appear, it must be removed by centrifuging. The liquid is adjusted to pH 4.6 with 0.1 N HCl while stirring. The ppt. obtained contains the active substance enriched 35-40 times, consisting of a chromoprotein showing absorption max. at 400-550 mμ and oxidizable reversibly in alk. pH. István Földy

GUBA, FERENC

MD *RM* ✓ Effect of ultrasonic, ultraviolet and x-rays on adenosinetriphosphate. Károly Garay and Ferenc Guba (Agrochem. Research Inst., Budapest). *Agrochimica et Talajtan* 1, 1-10(1951).—Aq. solns. of Na. adenosinetriphosphate (ATP) of 50 γ/ml. concn. were treated by ultrasonic radiation, by x-rays, and by ultraviolet irradiation. Then the enzymic splitting was detd. by adenosinetriphosphatase (I) in B-myosin prepd. from rabbit muscle. Irradiations caused a reduction of periods required for splitting phosphate from ATP by I. When the solvent (H₂O) rather than the soln. of ATP was irradiated, the I of B-myosin split the ATP slowly. The adsorption spectra of ATP solns. were changed by the irradiations; the structure of ATP was probably altered.

István Fináky

GUBA, FERENC

✓ Adenosinetriphosphate (ATP) content of corn seedlings.
 Ferenc Guba (Agr.-chem. Research Inst., Budapest).
Agrokémia és Talajtan 1, 11-14(1971).—Corn seedlings
 grown in sand culture without any nutrients were examd. at
 ages of 5 to 15 days. Content of total P was, in seedlings
 aged 5, 7, 9, 11, 13, and 15 days, 1.4, 1.42, 1.40, 1.39, 1.36,
 and 1.30, inorg. P 0.9, 0.9, 0.88, 0.8, 0.78, and 0.76, acid-
 labile P 0.12, 0.13, 0.17, 0.20, 0.18, and 0.15, acid-labile P
 originating from ATP 0.012, 0.010, 0.023, 0.031, 0.03, and
 0.021 mg. in 1 g. fresh substance. The ATP content detd.
 by the Straub method was 0.1, 0.133, 0.20, 0.238, 0.26, and
 0.21 mg. in 1 g. substance. The acid-labile P present in the
 hot trichloroacetic acid ext. of corn seedlings originates
 partly from ATP. István Földi

GUBA, FERENC

Investigation of the structure of some fibrous proteins by electron microscope. Ferenc Guba (Hung. Acad. Sci., Budapest). *Agrokémia és Talajtan* 1, 431-6(1952). Electron-microscopic investigation of myosin, keratin, and fibrin showed no traces of periodicity in protein structure when no staining was applied. Dyes used for staining were: phosphotungstic acid (1% soln. adjusted to pH 5 with an acetate buffer) (I), uranyl acetate (1%) (II), and β -chloro-mercuribenzoate (0.01M) (III). Myosin stained with II or III showed a fibrillar structure, the distance of striation pattern ranging between 100 and 300 Å. Staining with I was unsuccessful for myosin and keratin. The latter when stained with II or III showed striation with distances of about 120 Å. None of the staining dyes mentioned was suitable to detect structural details of fibrin. Treatment with Millon reagent showed bead necklace-like structure with distances of 220-40 Å. These data confirm that myosin, keratin, and fibrin consist of globular components. This structure is characteristic of fibrous proteins in general.

István Földi

GUBA, F.;KAROLYHAZI, M.

Electrooptic studies of the structure of certain fibrous proteins.
Acta physiol. hung. 3 no.2:311-316 1952. (CLML 24:3)

1. Of the Electron-Microscopy Laboratory of the Hungarian Academy of Sciences.

BALOGH, G.; GUBA, F.

Morphological changes of *Mycobacterium tuberculosis* caused by p-acetylamino benzaldehyde-thiosemicarbazone (thyomicid). Acta physiol. hung. 3 no.2:459-463 1952. (CLML 24:3)

1. Of the Pulmonary Diseases Clinic of Budapest University and of the Electron-Microscopy Laboratory of the Hungarian Academy of Sciences.

BALOGH, G.; GUBA, F.

Electronoptic studies of division in *Mycobacterium tuberculosis*.
Acta physiol. hung. 3 no.2:465-467 1952. (GLML 24:3)

1. Of the Pulmonary Diseases Clinic of Budapest University and of the
Electron-Microscopy Laboratory of the Hungarian Academy of Sciences.

-UBH, F

C. A. V-48
Jan 10, 1954
Physiology

(23)

Certain electron microscopic observations on cross-striated muscle fibrils. Ferenc Guba and Endre Biró (Hung. Acad. Sci., Budapest). *Agrokémia és Talajtan* 2, 41-3(1953).—Prolonged extn. of isolated fibrils of the psoas muscle of rabbits and rats showed structureless thin membranes, confirming the existence of a membrane surrounding the individual myofibrils. Shorter extn. indicated faint A-disks without any visible structures corresponding with Z-membranes which, in relation to the noncollagenous A-substance, dissolve more readily. Z-membranes seem thus to be built of some noncollagenous material. The extg. agent applied was 0.05N NaOH. István Földi

GUBA, F.

Guba, F.; Erdos, T.

"Electron-Microscopic Investigations of Ram Spermatozoa." p. 59. (Acta Physiologica.
Supplement to v. 4, 1953, Budapest)

SO: Monthly List of East European Accessions. Vol 3 No 6 Library of Congress, Jun 54, Uncl.

GUBA, F.

Hungary

CA: 47:11957

with E. SCHULEK and E. PUNGOR

L. Eotvos Univ., Budapest

"Electron-microscope control of envelope thickness in adsorption phenomena."

Anal. Chim. Acta 8, 261-73 (1953) (in German).

62185433 131.826 578.6

Improvements in the technique of preparing objects for electron microscopy - The first (Gaba) electronmicroscopic preparations - Gaba and I. Sugar. (Hungarian Journal of Chemistry, Kémiai Polymér - Vol. 39, 1953, No. 1, pp. 18-24, to figs.)

Hungarian Technical Abst.
1-6 No. 1
54

The following improvements in preparative technique are described: (1) Replicas prepared from the surface of dried muscle tissues. A sample of dried muscle tissue of uniform thickness was glued to a glass slide. One side of a 0.5 mm thick polystyrol plate was softened with ethyl bromide. The softened side was placed on the muscle tissue while the other side of the plate was covered with another glass slide. All this was slightly pressed together with Hoffmann's clamps. Within 2 to 3 hours the polystyrol plate solidified completely and a positive metal replica was obtained from this negative. (2) Replicas prepared from wet muscle tissues. The tissue sample impregnated with glycerol and held firmly on a glass slide with rubber strings was covered with a 1-2 per cent solution of collodion. The collodion film remaining after evaporation of the solvent was freed from the tissues by immersing it in water and the pseudo replicas were digested with pepsin. A positive replica was prepared from the finished dried collodion film. (3) The preparative technique used for electron microscopy was applied in the preparation of samples for light microscopy. The application of polystyrol replicas in light microscopy is described. (4) The preparation of large surface oxide films. A collodion film was covered

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(2)
with metallic aluminium by evaporation. The resulting aluminium film was oxidized electrochemically and the collodion film was subsequently dissolved. (5) A methyl cellulose film was covered with a silicon oxide film by means of evaporation and then the methyl cellulose was dissolved in water. As opposed to opinions expressed in literature an intact silicon oxide film remained. (6) Biological objects for electron microscopy were treated on metal grids cemented to glass slides put into special containers where they were subjected to enzymic treatment, washing, staining etc. without becoming damaged. The grids were plated with gold in order to increase their resistance to chemicals.
P. G.

HAJOSI, Gyorgy; VADASZ, J.; GUBA, F.

Electron microscopical studies on cell cultures with modified preparative technic. Acta morph. hung. 4 no.4:545-549 1954.

1. Elektronenmikroskopische Abteilung des Institutes fur Messtechnik und Instrumentenkunde (Leiter F.Guba) der Ungarischen Akademie der Wissenschaften und Institut fur Histologie und Embryologie (Vorstand Prof. I. Toro) der Medizinischen Universitat, Budapest.

(ENDAMOeba, culture

tissue culture, electron microscopy)

(MICROSCOPY, ELECTRON

of Endamoeba tissue culture on collodion membrane)

GUBA F., HAJÓSSI G. and SZIVESSY K.

Elektronenmikrosk. Lab., Ungarische Akad. der Wissensch., Budapest. *Die
elektronenmikroskopische Untersuchung der Protofibrillen des quergestreiften Muskels.
Electron microscopy of the protofibrils of striated muscle ACTA PHYSIOL. ACAD. SCIENT.
HUNG. (Budapest) 1954, 5/suppl. (17-18)

SO: ^cEXERPTA MEDICA, SECTION II VOL. 7 NO. 11

GARAY, K.; GUBA, F.

The reversible change of adenosinetriphosphate after radiations.
Acta physiol. hung. 5 no.3-4:393-399 1954.

1. Agrochemisches Forschungsinstitut, Budapest, und Biochemisches
Institut der Medizinischen Universität, Budapest. (Eingegangen
am 14. Januar 1953)

(ADENYLPHOSPHATE

*decomposition, eff. of ultrasonic & ultraviolet radiations)

(ULTRASONICS, eff.

*ATP decomposition)

(ULTRAVIOLET RAYS, eff.

*ATP decomposition)

BAUMANN, M.; BLICKLE, T.; GUBA, F.

Polymerization of actin. Acta physiol. hung. Suppl. no.6:70-71 1954.

1. Elektronmikroskopische Abteilung des Instituts für Instrumenten-
und Messtechnik der Ungarischen Akademie der Wissenschaften,
Budapest.

(MUSCLE PROTEINS

actin, polymerization)

GUBA, F.

GERM.

Morphology of barium sulfate precipitates prepared by the L. W. Winkler method. E. Schulz, E. Fung, and F. Guba (L. Winkler Univ., Budapest). *Anal. Chim. Acta* 10, 600-61 (1954) (in German); cf. C.A. 49, 11987g. By investigations employing the electron microscope it is shown that an addn. of NH_4Cl at the time of the pptn. of BaSO_4 according to W.'s method exerts an influence on the morphology of the ppt.; the latter then filters easily. London A. Survey

GLUBA, F.

GERM.

Electron-microscope investigations in the sphere of crystal
formation. B. Fungor, B. Schulek, and P. Guba. (1)
Polys. Univ. Budapest. Anal. Chem. Abstr. 11, 12-17
(1954) (In German).—The microstructure of NH_4Cl crystals
was studied with the electron microscope. The results
confirm the accuracy of the Kast-Susskal representation
(C.A. 22, 912, 3074). London A. Surver

RW
222

Guba, F.

check Electron microscope study of structure of silica gels. 1. Sagar and F. Guba (*Acta chim. hung.*, 1955, 7, 233-244). A thin continuous gel layer is supported on a metal film and the structure of the gel is examined as a continuum. It is shown that the gel skeleton consists of threads of a globular structure which form networks having a high degree of regularity and well-ordered bundles of filamentous formations. Pore diameter and pore length distributions are determined by direct measurements of the micrographs and specific surfaces and pore volumes are calculated. The results show fairly close agreement with data derived from adsorption. Explanations are given for differences which are used in a discussion of the structure of the gels.

C. A. SLATER

PM

GUBA, F.

Report of metal research completed at the Section of Electron Microscopes of the Institute of Measurement Technique and Instruments of the Hungarian Academy of Sciences; also, remarks by P. Csokan and others. p. 347

Vol. 16, no. 2/4, 1955
KOZLEMENYEI

SOURCE: Monthly list of East European Accessions, (EEAL), LC,
Vol. 5, No. 3, March, 1956

Guba, Ferenc

MD
✓ The heterodispersity and molecular structure of dextran applied as a substitute for plasma. Béla Kisszán, László Hegedus, Ferenc Guba, Mts. Mihály Bárány, and Endre Tomorhény (Research Inst. Pharm. Ind., Budapest). *Magyar Kém. Folyóirat* 61, 65-73(1955).—On the basis of investigation of mol. wt., heterodispersity, and proportion of 1,6 to 1,4 glycosidic bonds of an acid-hydrolyzed plasma substitute, a lab. method was evolved for the fractionation of dextrans. The η_{sp}/c values detd. in 6, 8, 10% solns. proved more suited for characterizing mol. wts. of degraded and fractionated dextrans than the values of intrinsic viscosity. Mol. wts. of dextran samples and of their fractions were detd. by diffusion and ultracentrifuging. Acid-degraded, unfractionated dextrans of intrinsic viscosities 0.16-0.21 were extremely heterodisperse. One or more fractionations are necessary to remove fractions of very low and very high mol. wts. to obtain a product suited as a plasma substitute. The glycosidic bonds of samples of degraded and fractionated dextran examd. were in about 85% of the cases of type 1,6. Appreciable deviations were observed with under-degraded dextrans (contg. 1,6 bonds in 73%) and with overhydrolyzed dextrans (contg. 0.1% 1,6 bonds).
I. E. Kiss

(4)

GUBA, F.; HAJÓSSI, GY.

Submicroscopic cell membrane of Endamoeba blattae Butschli.
In German. p. 279. ACTA BIOLOGICA. (Magyar Tudományos
Akademia) Budapest. Vol. 6, no. 3/4, 1956.

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 5, No. 12, December 1956.