

MINAR, S., dr.

Causes of stains on polished optical glass during the manufacturing process and ways to prevent them. Jemna mech opt 5 no.4:107-111
Ap '60.

1. Ustav pro vyzkum optiky a jemne mechaniky, Prerov.

MINAR, S. dr.

Present conditions, the importance and main tasks of research in optics and precision mechanics. *Jenna mech opt* 5 no.5:135-140 My '60.

1. Ustav pro vyzkum optiky a jemne mechaniky, Prerov.

MINAR, S., dr., C.Sc.

Effect of fundamental parameters on the glass grinding process.
Jemna mech opt 7 no.6:167-171 Je '62.

1. Ustav pro vyzkum optiky a jemne mechaniky, Prerov.

MINAR, S.

Principles of climatotechnology of optical instruments. Jena mech
opt 7 no.12:382-387 D '62.

MINAR, S., RNDr., C.Sc.

Protection of optical surfaces from degradation effect of climatic conditions. Jemna mech opt 8 no.3:69-73 Mr '63.

1. Ustav pro vyzkum optiky a jemne mechaniky, Prerov.

MINAR, S., RNDr., CSc.

New methods in the technology of production of outer reflecting layers on glass. Jemna mech opt 8 no.11: 353-357 N°63.

1. Ustav pro vyzkum optiky a jemne mechaniky, Prerov.

ACCESSION NR: AP4016122

Z/0012/64/000/001/0007/0018

AUTHOR: Minar, Silvestr (Minarzh, S.)

TITLE: New findings in machining optical silicon glass by grinding and polishing

SOURCE: Silikaty, no. 1, 1964, 7-18

TOPIC TAGS: glass grinding, glass polishing, polishing machine, polishing powder, polishing velocity, polishing theory, cerium dioxide powder

ABSTRACT: For polishing, suitable powdered substances in water suspension are used to remove glass damage caused by grinding. Pressures of 500 to 4000 g/cm² were studied by the author. To obtain acceptable polishing, the equation $R_2 = (6.9 \pm 1.7) R_a$ must apply; R_2 is the mean value of the maximum differences between five high and low points on the surface of the glass, R_a is the arithmetic mean deviation from the middle line of the glass surface. Experiments using polishing velocities of 5 m/sec and powdered Ce₂O₃ are described. The oxide was prepared by calcination of Ce oxalate at 900 C; the powdered mixture contained also ferric chloride and electro-corundum. The chemical mechanism of

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ACCESSION NR: AP4016122

polishing is explained by the theory of broken chemical bonds between silicon oxide polymers, and the formation of activated surface centers. Action of Ce oxide in water suspension is explained by formation of CeH_2O complex cations and hydroxyl anions. The anion of the dissociated surface acid forms a bond with the cation of the dissociated base on the surface of the crushed grain of the polishing powder. This bond is changed by the cation of the polishing tool, which replaces the cation of the polishing powder. Preferential breaking of bonds and their modification take place according to the scheme of the polishing process. The microscopic particles of glass form a thin amorphous layer on the polished glass surface and are finally washed off from the working area. The polishing takes place basically in only one direction. Orig. art. has: 9 figures, 3 tables.

ASSOCIATION: Meopta - Ústav pro výzkum optiky a jemné mechaniky (Meopta - Institute for Optical Research and Precision Mechanics) Prerov.

SUBMITTED: 15Dec62

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: MA, MD

NO REF SOV: 004

OTHER: 010

Card 2/2

L 36970-66 EWP(e)/EWP(v)/T/EWP(t)/ETI LJP(c) JD/WF/JG/AT/WE
ACC NR: AP6027846 SOURCE CODES: C2/0030/66/000/001/0011/0012

AUTHOR: Minar, S. (Doctor; Candidate of sciences)

ORG: United Factories for Precision and Optical Instruments, National Enterprise, Prerov (Moravia)

TITLE: Formation of metal oxide layers on glass

SOURCE: Jouma mehanika a optika, no. 1, 1966, 11-12

TOPIC TAGS: metal oxidation, silicate glass, oxide formation

ABSTRACT: The paper discusses complex problems in the production of oxide layers on silicate glass supports. The principles of the processes and the events characteristic of their course are described and the manufacturing conditions influencing the required course of the processes are considered. [Based on author's Eng. abstr.]
[JPRS: 35,326]

SUB CODE: 11, 07 / SUBM DATE: 26Oct65 / OTH REF: 015

1. 11087-66

ACC NR: AP6004816

SOURCE CODE: CZ/0013/66/000/001/0028/0028

INVENTOR: Mlnar, Silvestr (Doctor); Chmelar, Vladimir

2P
B

ORG: none

TITLE: Preparation of neutral light filters on glass. CZ Pat. No. 112645

SOURCE: Sklar a keramik, no. 1, 1966, 28

TOPIC TAGS: light filter, optic filter, glass coating, nickel compound, chromium compound, phosphide, thin film

ABSTRACT: A Czechoslovakian Authors Certificate has been issued for neutral light filtering thin (0.01—0.1 μ) films of amorphous nickel or chromium phosphide, chemically deposited on glass. The films contain a minimal excess of base metal and may be heat treated up to 350C.

[JK]

SUB CODE: 11/ SUBM DATE: none/ ATD PRESS: 4/69

Card 1/1 VMB

L 13539-65 EWP(e)/EWT(m)/EWP(b) Pq-4 WH

ACCESSION NR: AP4044505

Z/0030/64/000/008/0233/0236

AUTHOR: Minar, Silvestr, (Doctor of natural sciences, Candidate of sciences)

TITLE: New trends in the technology of production and finishing optical surfaces

SOURCE: Jemna mechanika a optika, no. 8, 1964, 233-236

TOPIC TAGS: glass, glass coating, glass processing, glass property, surface active substance, surface condition

ABSTRACT: The various trends in research dealing with the production of optical surfaces of pressed glass are described, with particular attention to the possible automatization of production. Research carried out in the author's laboratory is described, dealing with the effect of very high polishing parameters, such as the pressure (3000 g/cm²) or the speed of the polishing-tool against the

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L 13539-65

ACCESSION NR: AP4044505

surface (5 m/sec). The elimination of anisotropy in the surface finish through the use of suitable grinding tool and glass plate kinematics is discussed. It is pointed out that in spite of prevalent opinions, the tests have shown that the grinding particles themselves remove only a fraction of a per cent of the glass, and the greater part of the removal is due to other physical or chemical phenomena. It is therefore meaningful to seek for new surface treatment techniques. These include the use of mechanical working combined with chemisorption, the use of CeO_2 in lieu of rouge, the use of tars, asphalts and plastic copolymers, the modification of the kinematic and rheological grinding conditions, the use of "cold polishing" to avoid distortion of the surface due to cooling the glass suspension. Other topics dealt with are the production of eyeglasses, the effect of the surface finish of the original glass on the properties of coatings subsequently deposited on its surface, surface activity of a freshly polished surface, protection of surfaces, improvement of the bond between the surface and a deposited

Card 2/3

L 13539-65

ACCESSION NR: AP4044505

metallic or nonmetallic coating, and the choice of techniques for improving these bonds.

ASSOCIATION: UVOJM, Prerov

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NR REF SOV: 000

OTHER: 000

Card 3/3

MINARA, Jiri; KRIZ, Jiri

Pharmacological relaxation of the muscles in relation to personal experiences with procuran. Rozhl. chir. 36 no.2:73-81 Feb 57.

1. I. chirurgicka klinika KU, nabočka v Pizni, prednosta doc. Dr. K. Domansky II. chirurgicka klinika KU, nabočka v Pizni, prednosta doc. Dr J. Spinka.

(DECAMETHONIUM COMPOUNDS, eff.

decamethonium iodide on musc. (Cz))

(MUSCLES, physiol.

eff. of decamethonium iodide (Cz))

POLAND/Theoretical Physics - Quantum Theory of Fields.

B-

Abs Jour : Ref Zhur Fizika, No 3, 1960, 5089
Author : Minardi, E.
Inst : -
Title : On the Bilocal Theory of the Electron
Orig Pub : Acta phys. polon., 1958, 17, No 6, 429-433

Abstract : The interaction between an electron and external electromagnetic field is described by an 8-dimensional spinor equation. The wave function depends symmetrically on the ordinary "external" coordinates λ_ν and on the "internal coordinates" γ_ν ($\nu=1, 2, 3, 4$). The electromagnetic mass of the electrons breaks up accordingly into "external" and "internal" part. In calculating "internal" part with the aid of perturbation theory, in the initial approximation the electron is considered as a Majorana neutrino. The total electromagnetic mass of the electron is found to be equal to the experimental one, if the universal length

Card 1/2

- 9 -

MINARDI, E.

On the bilocal theory of the electron. In English. p.429.

ACTA PHYSICA POLONICA. Warszawa, Poland. Vol. 17, no. 6, 1958.

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

MINARIK, F.; DURCEK, K.;-MINARIK, A.-

The problem of dispersed radiations near diagnostic x-ray apparatus.
Pracovni lek. 10 no.2:141-144 May 58.

1. Ustav hygieny prace a chorob z povolania, Bratislava, riaditel MUDr.
Imrich Klucik, F.M. Bratislava, ul. 29. Augusta 8.

(ROENTGEN RAYS, injurious effects
hazards in vicinity of diag. x-ray equip. (Cz))
(ROENTGENOGRAPHY,
same)

MINARIK, F.; DYURCHEK, K.; MINARIK, A. (Bratislava)

Danger to medical personnel represented by the scattering of
rays in radiography. Gig.truda i prof.sab. 3 no.4:11-17
Jl-Ag '59. (MIRA 12:11)

1. Institut gigiyeny truda i professional'nykh zabolevaniy.
(X RAYS--SCATTERING)

MINARIK, E.

Czechoslovakia

CA:47:11780

"Effect of pH of water on the solubility of the pectins in exhausted
cossettes."

Paměstř Potravín 3, No. 1, 35-6(1952); Sugar Ind. Abstr. 14, 193
(1952)

MINARIK, E.

MINARIK, E. Selection of wine yeasts resistant to SO₂ and their application in the fermentation of sulfurized musts. p. 183.

Vol. 2, no. 8, Aug. 1956
KVASNY PRUMYSL
TECHNOLOGY
Praha, Czechoslovakia

So: East European Accession Vol. 6, no. 2, 1957

MINARIK, E.

A contribution to the study of wine yeast. p. 21. BIOLOGIA, Vol. 11,
no. 1, 1956.

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

CZECHOSLOVAKIA / Microbiology. Technical Microbiology. F-3
Abs Jour: Ref Zhur-Biol., No 16, 1958, 72023.

Author : Minarik, Erich.

Inst : Not given.

Title : On The Influence of Fungicides and Insecticides
on the Fermentation of Grape Must.

Orig Pub: Biologia, 1956, 11, No 9, 523-529.

Abstract: A Bordeaux mixture, through frequent sprinkling and increased concentration, can impair the fermentation process: sometimes the fermentative capacity of the yeasts is completely paralyzed. Sulfur preparations ("sulikol", ISO bariurum polysulfide), were used for sprinkling under normal conditions, as well as dinocide and dinol, even though use of the latter in increased concentrations exerted no effect on the fermentation.
-- O. S. Grebenshchikov.

Card 1/1

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MINARIK, E.

CZECHOSLOVAKIA / Microbiology. Technical Microbiology. F-3

Abs Jour: Ref Zhur-Biol., No 16, 1958, 72022.

Author : Minarik, Erich.

Inst : Not given.

Title : Preliminary Tests on Preparing Wines by the Use
of Activators from Mold Fungi.

Orig Pub: Kvasny prumysl, 1957, 3, No 11, 251-253.

Abstract: Activators from Aspergillus niger, Penicillium
notatum and Botrytis cinerea, tested under lab-
oratory and semi-productive conditions with
juices of grapes and malt musts, accelerate the
fermentation of sugars, especially in the first
phase of fermentation and have no influence on
the taste and flavor of the beverages obtained.
-- From the author's resume.

Card 1/1

MINARIK, ERICH

H-27

CZECHOSLOVAKIA/Chemical Technology, Chemical Products and
Their Application, Part 3. - Fermentation
Industry.

Abs Jour: Referat. Zhurnal Khimiya, No 10, 1958, 34154.

Author : Erich Minarik,

Inst : Not given.

Title : Influence of Activators Produced by Mold Fungi on Must
Fermentation.

Orig Pub: Biologia, 1957, 12, No 6, 454-459.

Abstract: The influence of fermentation activators from *Aspergillus niger*, *Botrytis cinerea* and *Penicillium notatum* on the fermentation of grape must was studied with introducing 0.5 g of the preparation per liter. In the presence of activators, fermentation is especially much accelerated in initial phases. At the 9th day of fermentation of

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CZECHOSLOVAKIA/Chemical Technology, Chemical Products and
Their Application, Part 3. - Fermentation
Industry.

H-27

Abs Jour: Referat. Zhurnal Khimiya, No 10, 1958, 34154.

highly sugary grape and fruit juices, where a deeper
substrate fermentation is achieved besides its acceler-
ation and lower concentration of volatile acids.

Card : 3/3

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MINARIK, E.

"Contribution to the selective fermentation of glucose and fructose by means of wine yeasts."

BIOLOGIA, Slovenska akademia vied, Bratislava, Czechoslovakia, Vol. 13, No. 12, 1958

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

Uncl.

MINARIK, E.

Improving the quality of our sweet-and vermouth-type wines. p. 170.

KVASNI PRUMYSL. (Ministerstvo potravinarskeho prumyslu) Praha, Czechoslovakia.
Vol. 5, no. 7, July 1959.

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 11, Nov. 1959.
Uncl.

MINARIK, E.; LAHO, L.; NAVARA, A.

Chromatographic proof of the fermentability of diagnostic sugars. p. 240.

KVASNY PRUMSYL. Praha, Czechoslovakia. Vol. 5, no. 10, Oct. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 9, no. 2, Feb. 1960.
Uncl.

MINARIK E.
COUNTRY : Czechoslovakia H-27
CATEGORY :
ABS. JOUR. : RZKhim., No. 1959, No. 72929
AUTHOR : Minarik, E.; Laho, L.; Navara, A.
INST. :
TITLE : Use of Paper Chromatography for Identification
of Brewer's Yeast
ORIG. PUB. : Polnohospodarstvo, 1959, 6, No 1, 15-28
ABSTRACT : Description of a chromatographic method of
investigation of the fermentation of sugars used in the
identification tests, by brewer's yeast, which in con-
junction with the known visual methods makes it possible
to determine more readily and with greater precision the
fermentability of sugars, particularly of raffinose and
galactose. -- Yu. Chel'tsova.
CARD: 71
84

MINARIK, Erich

Composition of the yeast flora of wine made in a viticultural region
in Little Carpathians. Biologia 15 no.4:272-279 '60. (EEAI 9:9)

1. Pobočka Československé akademie polnohospodarských vied-
Výskumný ústav pre vinohradníctvo a vinárstvo, Bratislava
(SLOVAKIA--WINE AND WINE MAKING)
(FERMENTATION)
(YEAST)

MINARIK, Erich

Systematic classification of technical strains of wine yeast.
Kvasny prum 9 no.10:242-245 0 '63.

1. Vyskumny ustav pre vinohradnictvo, Bratislava.

MINARIK, Erich, inz., ScG.

Collection of yeast plants and yeast microorganisms. Vest ust
zemedel 10 no.6/7:281-284 '63.

1. Vyskumny ustav pre vinohradnictvo a vinarstvo, Bratislava.

MINARIK, E.

CZECHOSLOVAKIA

Erich MINARIK, Dipl. Ing., CSoc; Research Institute for Enology and Wine Industry [Original version of affiliation not stated], Bratislava.

"Occurrence of *Saccharomyces cerevisiae* Saito on Grapes."

Bratislava, Biologia, Vol 18, No 2, 1963; pp 160-163.

Abstract [German article; English summary modified]: From grapes and cider in West Slovakia, 2 strains of this rare Far-Eastern yeast were isolated. Tabulation of comprehensive biochemical characteristics shows relationship to the strain as described by Kudriawzew. Four drawings of cells, table; 4 references: 1 Soviet, Dutch text, personal communication, Slovak thesis by author.

1/1

MINARIK, Erich

Microflora of sweet Tokaj wines. Kvasny prum 10
no. 2: 40-42 F '64.

"Key for determination of bacteria" by J. Arpai.
Reviewed by Minarik. Ibid.: 45.

"Identification of anthocyanin dyes by thin layer
chromatography" by H. Tanner, H. Rentschler, G. Senn.
Reviewed by Minarik. Ibid.: 48.

"Microbiological method for determination of chemical
preservative in wines" by H. Luthi, T. Bezzegh. Reviewed
by Minarik. Ibid.:48.

1. Vyzkumny ustav pre vinohradnictvo a vinarstvo,
Bratislava.

MINARIK, Erich

Stabilization of the Tokay choice wines against biological
turbidity. Kvasny prum 10 no. 6:131-133 Je '64.

1. Research Institute of Viticulture and Wine Making, Bratislava.

MINARSKY, E., inz.

Dekatron ECT 100, a new element for calculation technology.
Slaboproudy obzor 25 no.1:55-57 Ja'64.

MINARIK F.

MINARIK, F.

Some data on the medical service of old Maribor. Zdrav. vest.,
Ljubljana 23 no.3-4:57-61 1954.
(HISTORY, MEDICAL
*Yugosl.)

MINARIK, Ferenc

Irradiation dangers to the physician in roentgenography. *Magy. radiol.*
10 no.2:106-108 June 58.

1. A Pozsonyi Munkaegeszsegugyi Intezet (igazgato: Imrich Klucik dr.)
kozlemenye.

(ROENTGENOGRAPHY

dose of x-ray scattered around x-ray appar., dangers to
roentgenologist (Hun))

MINARIK, F.; DURCEK, K.; MINARIK, A.

The problem of dispersed radiations near diagnostic x-ray apparatus.
Pracovni lek. 10 no.2:141-144 May 58.

1. Ustav hygieny prace a chorob z povolania, Bratislava, riaditel MUDr.
Imrich Klucik, F.M. Bratislava, ul. 29. Augusta 8.

(ROENTGEN RAYS, injurious effects
hazards in vicinity of diag. x-ray equip. (Cz))
(ROENTGENOGRAPHY,
same)

MINARIK, F.; DYURCHESK, K.; MINARIK, A. (Bratislava)

Danger to medical personnel represented by the scattering of
rays in radiography. Gig.truda i prof.sab. 3 no.4:11-17
Jl-Ag '59. (MIRA 12:11)

1. Institut gigiyeny truda i professional'nykh zabolevaniy.
(X RAYS--SCATTERING)

DYURCHEK, K. [Důrček, K.]; MINARIK, F.; STANKOVICHOVA, A. [Stankovičova, A];
PETRASHOVA, M. [Petrášová, A.]; URICHEK, L. [Uriček, L.]

Doses of X irradiation to which patients and medical personnel are
exposed during cardiac catheterization. Med.rad. 4 no.10:66-70
0 '59. (MIRA 13:2)

1. Iz Instituta gigiyeny truda i professional'nykh zabolevaniy v
Bratislave (dir. - doktor med.nauk I. Kldchik).
(HEART CATHETERIZATION)
(RADIOGRAPHY)

- STANKOVICOVA, Alojzia (Bratislava, ul. Narodneho povstania c. 18-20);
- MINARIK, Frantisek (Bratislava, ul. Narodneho povstania c. 18-20);
- DURCEK, Karol (Bratislava, ul. Narodneho povstania c. 18-20)

Methods of absolute dosimetry of Sr⁹⁰. Mat fyz cas SAV 11
no.3:214-221 '61.

1. Ustav hygieny prace a chorob z povolania, Bratislava.

KLUVANEK, P.; DURCEK, K.; MASARYK, S. & MINARIK, P.; za tech.spoluprace
URICKA, L.; DOUPOVCA, V.

Effect of technical shortcomings of roentgeno-diagnostic equipment
on spreading of secondary radiations. Cesk.rentg. 15 no.1:30-36
P '61.

1. Ustav hygieny prace a chorob z povolania v Bratislave, riaditel
MUDr. I. Klucik.
(RADIATION PROTECTION)

MINARIK, F.; STANKOVICOVA, A.; MANCA, J.; DOUPOVCA, V., techn. spoluprace

Electrical properties of dusts in ore mines in Slovakia. Pracovni
lek. 13 no.6:269-274 Ag '61.

1. Ustav hygieny prace a chorob z povolania v Bratislave, riaditel
MUDr. I. Klucik.

(DUSTS)

BORISEK, R., dr. inz.; MINARIK, F., inz.

Mechanism of sulfite delignification at high temperatures.
Sbor cel pap no. 747-62 '62.

SCHMIED, J., inz.; MINARIK, F., inz.

Recirculation of cooking liquor in delignification reaction.
Sbor cel pap no. 7863-72 '62.

CZECHOSLOVAKIA

MINARIK, F., STANKOVICOVA, A., MANCA, J., Institute of Hygiene of Work and Professional Diseases, Manager Dr I. Klucik (Ustav hygieny prace a chorob z povolania, riaditel MUDr. I. Klucik), Bratislava.

"Some Problems of Medical Physics in Work with Sources of Neutron Radiation."

Prague, Pracovni Lekarstvi, Vol 15, No. 2, March 63, pp 69 - 74.

Abstract:The authors give first a description of the properties of neutrons and of the nature of their radiation for 4 sources (Ra-Be, Po-Be, Rn-Be, Sb 124-Be). They give also basic principles for the safety of handling these materials. In the last part of the article they discuss a few specific problems of work safety with the radiation sources mentioned.

1 Table, 1 Figure, 3 Western, 1 Czech, 4 Russian references.

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STANKOVICOVA, A.; MINARIK, F.; Institute of Hygiene of Work and of Occupational Diseases at Bratislava, Manager Prof. doctor M. Kosal / Ustav hygieny prace a chorob z povolania, Bratislava, riaditel pro. dr. M. Kosal /.

"Experimental Determination of Efficiency of Filters Designed for Retention of Radioactive Aerosols."

Prague, Pracovni Lekarstvi, Vol 15, No 8, 1963, pp 343-344

Abstract: The article describes the efficiency of 5 filter media tested. The determination was made by measuring beta activity of media through which passed air with fission products of radon RaB and RaC. Membrane filters were the most effective. 1 Figure, 1 Table, 5 Western, 1 Russian reference.

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MIMARIK, Frantisek, inz.

Analysis of multistage pulp washing. Papir a celuloza 18
no.5:98-101, 104 My '63.

1. Vyskumny ustav papieru a celulozy, Bratislava.

MINARIK, F.; UHRIK, F.; HRABOVCOVA, A.; MORAVKOVA, M.; URICEK, L.

Spectral analysis of radioactive gamma radiants in waste
water and Danube water. Vodni hosp 14 no.12:468-469 '64.

KLUCIK, Emrich; BENO, Milan; TRNOVEC, Tomas; MINARIK, Frantisek.

Metabolism of Sb124-labelled antimony oxide in rats. Prac.
lek. 16 no.2:53-56 Mr'64

1. Ustav hygieny prace a chorob z povolania v Bratislave;
riaditel: prof. MUDr. M.Nosal.

TRNOVEC, T.; BENO, M.; ZBORIL, V.; PLESKOVA, A.; RUSEK, V.; MINARIK, F.

Effect of parathyroid hormone on radiocerium uptake by
bone tissue. Bratisl. lek. listy 44 no.1:24-29 '64.

1. Ustav hygieny prace a chorob z povolania v Bratislave;
riaditel: prof. MUDr. M. Nosal.

*

SCHMIED, Josef, inz. CSc.; MINARIK, Frantisek, inz.; PUCEK, Bohuslav,
promovany fyzik

Matrices of mass and power transfer in the design and control
of pulp production. Papir a celulosa 20 no.1:4-10 Ja '65.

1. Research Institute of Paper and Cellulose, Bratislava.

MINARIK, F.; UHRIK, F.; HRABOVCOVA, A.; PETRASOVA, M.; DOUPOVEC, V.;
MORAVKOVA, M.; URICEK, L.

Analysis of gamma-emitters in the fallout on the site of the
nuclear electric power plant A-1. Cesk. hyg. 10 no.7:400-403
Ag '65.

/1. Ustav hygieny prace a chorob z povolania, Bratislava.

L 30921-66

ACC NR: AP6022920

SOURCE CODE: CZ/0038/66/000/001/0022/0023

AUTHOR: Uhrík, František; Minárik, František; Hrabovcová, Alojzia

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B

ORG: Research Institute for Labor Hygiene and Occupational Diseases, Bratislava
(Výskumný ústav hygieny práce a chorob s povolaním)

TITLE: Automatic step drive of the discriminator in a pulse spectrophotometer

SOURCE: Jaderna energie, no. 1, 1966, 22-23

TOPIC TAGS: automatic machine, spectrophotometer, frequency discriminator, gamma spectrum, spectrum analysis, pulse counter, recorder equipment

ABSTRACT: The article is an abstract of authors' Yearly Report of the Institute's Project VUHPCHP No 9/1963. Automatic step drive of the single channel spectrophotometer "Frieske-Hoepfner FH-94" is described. The movement takes place when a given number of pulses has been registered on an FH-49 pulse counter. The period for which a given channel position remains unchanged is recorded on an FH-449 time recorder. The arrangement is suitable for spectral analyses made with low gamma activities; for these the instrument as supplied by the makers is not suitable. Orig. art. has: 2 figures and 2 tables. [JPRS]

SUB CODE: 20, 09, 13 / SUBM DATE: none

Card 1/1 CC

UDC: 621.374.32 539.12.075:621.364

0915 0996

MINARIK, Jindrich

Otazky primestskeho zemedelstvi v CSR. (Problems of the Suburban Agriculture in Czechoslovakia. 1st ed. illus., maps, bibl, notes) Introduction by V. Vrbensky. Prague, SZN, 1957. 112 p.

Problems of the Cz. suburban agriculture and its tasks. Comparison with the Soviet conditions. The study deals with the special nature, scope, specialization, and organization of the production in the Cz. suburban agriculture, its methods of planning, and it presents maps which represent an outline for determining the suburban zones, and organization and specialization of their agriculture.

Bibliograficky katalog, CSR, Ceske knihy, No. 35. 8 Oct 57. p. 747.

MINARIK, J.

Agriculture in areas adjacent to Czechoslovak towns.

p. 139 (VYZIVA LIDU) Vol. 12, no. 10, Oct. 1957,
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

CZECHOSLOVAKIA / Farm Animals. Wild Animals

Q-5

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12153

Author : Minarik J. M.

Inst :

Title : On the Breeding of New Fur Animals (O razvedenii
novykh pushnykh zverey)

Orig Pub: Chovatel, 1957, No 3, 45

Abstract: A certain increase in the number of South American chinchilla, a high-priced animal, on the farms of Czechoslovakia is reported. The breeding of Chinchillas on a large scale is limited by a considerable difference of the local climate from that of the habitat of the chinchilla. The possibility of the acclimatization of this animal is considered.

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MINARIK, L.

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CZECHOSLOVAKIA

MINARIK, L; STEKLACOVA, E; CERBA, A.

1. Hospital for Tuberculosis (Liecebna pre tuberkulozu),
Vysna Haha; 2. Institute of National Health
(Ustav narodneho zdravia); Revucej - (for all)

Prague, Rozhledy v tuberkulose, No 2, 1963, pp 77-86

" The Pathology and Clinical Course of Cystoid
Cavities."

BATEK, F.; KUCERA, A.; KUCEROVA, V.; MINARIK, L.

Role of the spleen in interoceptive conditioned blood picture changes in rabbit. *Gesk. fysiolog.* 7 no.5:429-430 Sept 58.

1. Fysiologicky ustav u Ustav organisace zdrvaotnictvi lek. fak. PU, Olomouc.

(BLOOD CELLS,

count, eff. of splenectomy on conditioned changes in rabbits (Cz))

(REFLEX, CONDITIONED,

conditioned blood count changes in splenectomized rabbits (Cz))

(SPLEEN, eff. of excis.

on conditioned blood count changes in rabbits (Cz))

BATEK, F.; KUCERA, A.; KUCEROVA, V.; MINARIK, L.

Effect of adrenalectomy on the course of interoceptive white and red blood picture changes in rabbits. Cesk. fysiол. 7 no.5:431-432 Sept 58.

1. Fysiologicky ustav a Ustav organisace zdravotnictvi lek. fak. PU, Olomouc.

(LEUKOCYTE COUNT,

eff. of adrenalectomy on interoceptive changes in rabbits (Cz))

(ERYTHROCYTES,

count, eff. of adrenalectomy on interoceptive changes in rabbits (Cz))

(ADRENALECTOMY, eff.

on interoceptive erythrocyte & leukocyte count in rabbits (Cz))

MINARIK, L.

"New views concerning the irritability of tissues"

Ceskoslovenska Fysiologie. Praha, Czechoslovakia. Vol. 8, no. 1, Jan 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 7, July 59, Unclass

KUCERA, A.; BATEK, F.; MINARIK, L.; KUCEROVA, V.

On the effect of pentamethonium on the course interoceptive changes of white and red blood pictures in rabbits. Cesk. fysiол. 8 no.5: 418-419 8 '59

1. Fysiologicky ustav a Ustav organisace zdravotnictvi Lek. fak. PU, Olomouc.

(METHONIUM COMPOUNDS pharmacol.)

(ERYTHROCYTE COUNT pharmacol.)

(LEUKOCYTE COUNT, pharmacol.)

KUCERA, A.;BATEK, F.;MINARIK, L.;KUCEROVA, V.

Effect of the pituitary on the dynamics of changes in white blood
picture. Cesk. fysiolo. 8 no.5:419-420 S '59

1. Fysiologicky ustav a Ustav organisace sdravotnistvi Lek. fak.
FU, Olomouc.

(LEUKOCYTE COUNT)
(HYPOPHISECTOMY eff.)

HIVANIK, Lubomir

A simple universal measuring device containing thyatron. Sbor .
ved. prac. lek. fak. Karlov. Univ. 7 no.4:557-562 '64.

1. Fyziologicky ustav Lekarske fakulty Palackeho University,
Olomouc (prednosta: doc. MUDr. A. Kucera).

①

CZECHOSLOVAKIA

HANAKOVA, S., KVAPILOVA, I., MINARIK, L: Physiological Institute
Medical Faculty, Palacky University (Fysiologicky Ustav Lek.Fak.
P.U.) Olomouc.

"Extension of Anesthesia Duration by Hyperventilation with Atmospheric Air."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 72.

Abstract: Use of an extension of anesthesia induced by thiopental after premedication with atropine-lobeline to influence CNS activity is discussed. The extension of anesthesia is connected to hyperventilation hypocapnia. It appears that the effect is due to hypocapnic vasoconstriction in the cerebral region. No references. Submitted at the "16 Days of Physiology" at Kosice, 29 Sep 65.

1/1

EXCERPTA MEDICA Sec.11 Vol.10/4 Oto-Rhino-Laryngo Apr57

MINÁRIK M,

831. MINÁRIK M. Otolaryngol. Klin. UK, Bratislava. *Foniatrická starostlivosť na Slovensku. Phoniatic care in Slovakia LEK.OBZOR 1956, 5/3 (175-180)

The author gives a short history of the science of speech and voice disorders and describes the contents and tasks of phoniatory and its development in Czechoslovakia where the care for speech voice and hearing disorders is directed by the State. In Slovakia, there are 2 phoniatic departments at the University Clinics and 4 other departments in provincial towns. Apart from that, logopaedic courses under the supervision of pediatricians are run in many towns.

Seeman - Prague (XI, 17*)

MINARIK, M.

Mac Production of chromic-vegetable tanned sole leathers in Czechoslovakia. J. M. Tomisek, L. Kuzka, and M. Minarik (Ministry Light Ind., Prague). *Kokufutsu* 5, 205-10 (1955).—The processes employed in U.S.S.R. and

in Czechoslovakia are described. Both involve a very light Cr tannage, followed by vegetable tannage in drums (U.S.S.R.) or a combination of suspenders and drums (Czechoslovakia). Data are given as to amt. of tannin wasted to the sewer under various conditions. II. *Ibid.* 227-8.—The effects of reduction of amt. of tannin given, and changes in compo. of the blend, on amt. of tannin wasted were studied. Only by using suspender liquors can the loss of tannin be kept at an economically tolerable level. The Czechoslovak leathers are softer, less dense, and more stretchy than U.S.S.R. leathers, but absorb less H₂O. Analytical data are given. By using the Cr-vegetable tanning process the time for tannage is shortened from 89 to 39 days. The bend leather is satisfactory, but insoles are not. Results do not support the advisability of converting sole leather tanneries to the Cr-vegetable process.
L. Mamer

3

MINARIK, M.

CZECHOSLOVAKIA/Chemical Technology. Chemical Products and
Their Application. Leather. Mechanical Gelatins.
Tanning Agents. Technical Albumens.

H-35

Abs Jour: Ref. Zhur-Khimiya, No 11, 1958, 38440.

Author : Tomisek M, Kucka L, Minarik M.

Inst : Not given.

Title : Results Achieved in Czechoslovakia in the Field of
Manufacturing Sole Leathers of Chrome Vegetable Tanning.

Orig Pub: Kozarstvi, 1955, 5, No 12, 227-228.

Abstract: Chrome vegetable tanning of sole leather does not yield
leathers like those of the usual tanning, either accord-
ing to quality or according to analytical characteristics.
The producing cycle is reduced from 86 to 39 days. Wear-
ing durability is almost the same as usual. See source
RZhKhim, 1958, 20184.

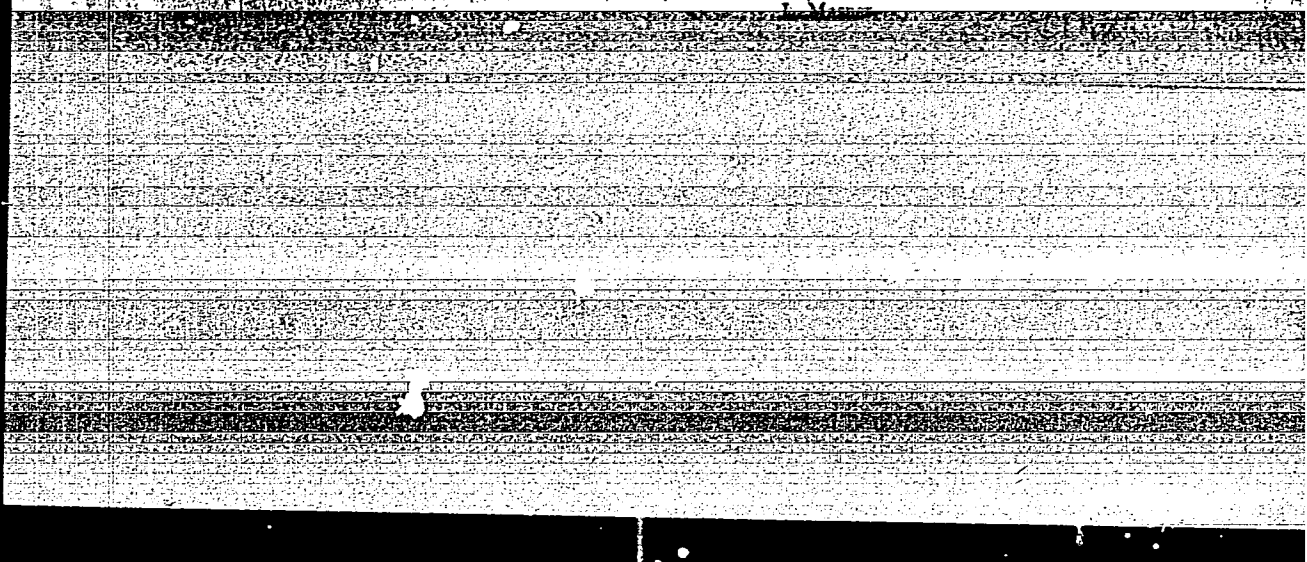
Card : 1/1

MINARIK, M.

Preparation of carbon-vegetable tanned sole leathers in
Czechoslovakia. III. M. Tomilek, L. Kucka, and M.
Minarik (Ministry of Light Ind., Prague). *Kozuvina* 0.
88(1966); cf. CIA 50, 10433. — A final pilot-plant test was
made by tanning in 8 suspenders and 2 drums. The concn.
was 7, 27, 46, 28 and 98 Barkometer, pI 3.5-3.85. The
amt. of Cr_2O_3 was lowered w/v.75%. The ratio of tannins
to montannins was -0.635, 0.784, 1.614 and 2.483.

"APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001134330



APPROVED FOR RELEASE: Monday, July 31, 2000

CIA-RDP86-00513R001134330C

CZECHOSLOVAKIA

MINARIK, Pavel, MVDr; DYML, Borivoj, MVDr; PETR, Otakar, MVDr

1. Vratislavice nad Nisou (for Minarik and Dymal); 2. Janska (for Petr)

Brno, Veterinarstvi, No 3 [March] 1967, pp 118-122

"Infectious nephritis in poultry."

MINARIK, Roman, inz.; SLYSKO, Pavol, inz.

Resistance welding of aluminum bronzes. Zvaranie 13 no. 7:
193-198 J1 '64.

1. Research Institute of Welding, Bratislava.

MINARIK, Roman, inz.

"Technology of resistance butt welding" by M.S.Kabanov and
E.S.Slepak. Reviewed by Roman Minarik. Zvaranie 11 no.8:255
Ag '62.

MINARIK, Roman, inz.

"Resistance pressure welding" by M. Lipa and J. Holasek.
Reviewed by Roman Minarik. Zvaranie 12 no.2:51 '63.

HYLMAR, Bohumil, inz.; OLSANSKY, Cestmir; MINARIK, Rudolf

Production of Edam cheeses by using cultures of Lactobacillus casei. Prum potravi: 14 no. 12:656-659 D '63.

1. Sdruzeni mlekaren, Vyroba cistych mlekarskych kultur, Praha (for Hylmar).
2. Vyzkumny ustav mlekarensky, Praha, pracoviste Zeletava (for Olsansky).
3. Lacrum, n.p., Zeletava (for Minarik).

MINARIK, Rudolf, inz.; OLSANSKY, Cestmir

Using polyvinyl alcohol and AC-15 percent Strucel emulsion
in Edam cheese curing. Prum potravín 15 no.8:414-417 Ag '64.

1. Iacrum National Enterprise, Plant Zelava (for Minarik).
2. Institute of Dairy Research, Prague, Worksite Zeletava (for Olsansky).

OLSANSKY, Cestmir; SEDLAK, Bronislav, inz.; MINARIK, Rudlof, inz.

Line for processing large cakes of cheese to be stored in caves on pallets. Prum potravin 15 no.12:624-627 D '64.

1. Institute of Dairy Research, Prague, Worksite Zeletava (for Olsansky). 2. Strojirny potravinarskeho prumyslu, Hradec Kralove (for Sedlak). 3. Laorum National Enterprise, Brno, Branch Enterprise Zeletava (for Minarik).

MINARIK, E.V.

PA - 2666

AUTHOR MINARIK E.V., NOVIKOV V.A.
TITLE Fission of U, Th, Bi and Tl induced by high energy γ -quanta.
 (Deleniy U, Th, Bi i Tl γ -kvantami bel'shikh energiy.-Russian)
PERIODICAL Zhurnal Eksperim. i Teoret. Fiziki 1957, Vol 32, Nr 2,
 pp 241 - 246 (USSR).
ABSTRACT Received: 5/1957 Reviewed: 6/1957
Experiments: The authors determined the dependence of the yields of photo fission of the nuclei of U^{238} , Th^{232} and $Tl^{203,205}$ on the maximum energy of the spectrum of Bremsstrahlung on the synchrotron of the Physical Institute of the Academy of Science of the USSR. After passing through a lead collimator, the γ -bundle of the synchrotron dropped into a momentum ionization chamber. The targets of the elements to be investigated consisted of thin layers of U_3O_8 , ThO_2 and of metallic Bi and Tl which were applied on to an aluminum base of 30μ thickness.
Discussion of results: The cross section of photofission can be represented in the form $\sigma_f = \sigma_a \Gamma_f / \Sigma \Gamma$ where σ_a denotes the cross section of the absorption of the photon by the nucleus and $\Gamma_f / \Sigma \Gamma$ - the relative probability of fissioning (0,2-0,4 for uranium and a value of about (2,5 - 3)- times as small for thorium). Therefore, the cross section of photofission by the increase of $\Gamma_f / \Sigma \Gamma$ is able to increase at the utmost by 5 times

CARD 1/2

Fission of U, Th, Bi and Tl induced by high energy γ -quanta. PA - 2666

its value in the case of uranium and by about the 10-fold in the case of thorium, at the utmost Experimental values of the cross sections of photo production, however, increase by about the 20-fold in the case of an increase of the energy of from 80 up to 250 MeV.

Within a wide domain of excitation energies the relative fission probability of the U^{238} nuclei remains practically constant. At energies of γ -quanta of from 10 to 300 MeV, an average of 3 - 4 neutrons is emitted on the occasion of each act of fission. At least in the case of U^{238} the increase of σ_f at photo energies of from 80 to 250 MeV is due only to the increase of σ . The same applies to other elements investigated here. The increase of the cross sections of photo fission observed above 150 MeV cannot possibly be explained by the re-absorption of mesons alone. The similarity of the energy dependence of the cross section of photofission and photoproduction of the mesons tends to confirm the assumption that one and the same mechanism of interaction of γ -quanta with nuclei is responsible for the increase of the cross sections of photofission. (8 illustrations)

ASSOCIATION: Physical Institute "P.N.LEBEDEV" of the Academy of Science of the USSR.

PRESENTED BY: -
SUBMITTED: 30. 8. 1956.
AVAILABLE: Library of Congress.
CARD 2/2

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.1135
S/120/62/000/005/008/036
E039/E420

AUTHORS: Agafonov, V.P., Govorkov, B.B., Denisov, S.P.,
Minarik, Ye.V.

TITLE: Determination of the efficiency of recording
gamma-quanta by means of monochromatization of a
beam of bremsstrahlung

PERIODICAL: Pribory i tekhnika eksperimenta, no.5, 1962, 47-50

TEXT: Description is given of a new method of investigating the
energy dependence of counter efficiency. In the path of a
collimated beam of bremsstrahlung (diameter 3 cm) is placed a
lead target which becomes an intense source of electron
positron pairs, emitted primarily in the same direction as the
incident γ quanta. Electrons of a definite energy E_0 , selected
from the beam by means of a magnetic field, collide with a second
lead target and produce γ quanta of energy E_γ (the target is
sufficiently thin to avoid the probability of double radiation and
for multiple scattering to be negligibly small). These γ quanta
of energy E_γ are allowed to enter the telescope detector T_γ
which is under investigation. Measurements were carried
Card 1/2

S/120/62/000/005/008/036
E039/E420

Determination of the efficiency ...

out on a beam of bremsstrahlung from the Physics Institute's synchrotron at 265 MeV. It is shown that the efficiency of a γ telescope rises steadily from a few % at 20 MeV to $\sim 40\%$ at ~ 150 MeV. Measurements of efficiency at two values of E_γ were made for other γ telescopes of similar construction and the results agreed within the statistical error. The variation of efficiency with thickness of the lead converter was also measured for $E_\gamma = 60.8$ MeV. A flat maximum at $\sim 20\%$ is obtained for a thickness of 8 mm. There are 4 figures.

ASSOCIATION: Fizicheskiy institut AN SSSR
(Physics Institute AS USSR)

SUBMITTED: December 25, 1961

Card 2/2

S/056/62/042/004/013/037
B163/102

AUTHORS: Govorkov, B. B., Denisov, S. P., Minarik, Ye. V.

TITLE: Elastic photoproduction of π^0 mesons on carbon at 155 Mev

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42
no. 4, 1962, 1010-1012

TEXT: γ rays with an average energy of 155 Mev from the FIAN synchrotron were used to produce π^0 mesons in the reaction $\gamma + C^{12} \rightarrow C^{12} + \pi^0$. The angular distribution of the π^0 mesons was determined by coincidence measurements of the two decay γ quanta with two γ ray telescopes, each consisting of two conventional fluid scintillation counters with a 5 mm lead converter in front. The telescopes were arranged in a plane whose inclination against the primary γ beam determined the average angle of emission of the π^0 mesons recorded. The experimental differential cross section for the elastic photoproduction of π^0 mesons is in good agreement with

Card 1/2

Elastic photoproduction of...

S/056/62/042/004/013/037
B163/B102

theoretical values calculated in the impulse approximation under the assumption that protons and neutrons contribute equally to the coherent photoproduction, and that the distribution of nuclear matter in the C^{12} nucleus equals the charge distribution known from electron scattering experiments. ✓

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR
(Physics Institute imeni P. N. Lebedev of the Academy of Sciences USSR)

SUBMITTED: November 23, 1961

Card 2/2

L 17620-63

EWT(m)/BDS AFFTC/ASD

8/056/63/044/003/018/053

54
53

AUTHOR: Govorkov, B. B., Denisov, S. P., and Minarik, Ya. V.

TITLE: Near threshold photoproduction of neutral mesons of nuclei

PERIODICAL: Zhurnal eksperimental'noy i tekhnicheskoy fiziki, v. 44, no. 3, 1963, 878-886

TEXT: Earlier experiments by researchers of both the East and West showed that the photoproduction of mesons by quanta of energy up to 200 Mev is basically due to elastic coherent production. The present paper presents the measurement of the angular dependence of the π^0 -meson photoproduction cross section on Be, Al, Cu, Cd, and Ta nuclei for 154 Mev mean primary photon energies. The π^0 -mesons were observed by recording coincidences of $\pi^0 \rightarrow \gamma + \gamma$ decay γ -quanta with the aid of two scintillation telescopes. An analysis of the results obtained shows that the main contribution to the cross section is from elastic coherent photoproduction. A more detailed analysis of experimental results will be published at a later date. A. M. Baldin and A. I. Lebedev evaluated the theoretical implications of the experimental results. There are 8 figures.

Card 1/2

L 17620-63

s/056/63/044/003/018/053 /

Near threshold photoproduction...

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR (Physics
Institute im. P. N. Lebedev of the Academy of Sciences USSR)

SUBMITTED: October 25, 1962

Card 2/2

L 10236-63 ~~BDS/EST(m) - AFFTC/ASD - IJP(C)~~ S/0056/63/044/005/1463/1469
ACCESSION NR: AF3000035

AUTHOR: Govorkov, B. B.; Denisov, S. P.; Lebedev, A. I.; Minarik, Ye. V. 60

TITLE: High partial waves in the photoproduction^A of neutral pions on protons 54

SOURCE: Zhurnal eksper. i teoret. fiziki, v. 44, no. 5, 1963, 1463-1469

TOPIC TAGS: Neutral pion photoproduction, threshold reactions, partial waves

ABSTRACT: The angular distribution of neutral pions produced on protons by photons of 181 MeV energy was measured with an aim at comparing directly the experimental results with the exact dispersion-relation calculations, which hitherto has met with some difficulties. An increase in the experimental accuracy and a determination of experimental quantities that can be calculated without the need for taking the dispersion integrals into account can help account for the remaining disparity. The authors describe an accurate measurement of the angular distributions of the neutral-pion photoproduction on protons near threshold, and give an analysis of the results from the point of view of reconciliation of experiment with dispersion-relation calculations. The

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L 10236-63

ACCESSION NR: AP3000035

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neutral pions were registered by simultaneously counting the two decay photons by scintillation-counter telescopes. The net results were more accurate angular distributions for neutral-pion photoproduction near threshold, better agreement with the one-dimensional dispersion-relation calculation, and detection of some disparity between the experimental data and the dispersion-relation calculations if no account is taken of the resonant meson states. This may indicate that the resonance meson states make some contribution to the investigated process. "The authors thank P. A. Cherenkov for interest in this work, A. M. Baldin for valuable advice, A. V. Kutsenko for help in the work with the computer, I. A. Yegorov for numerical estimates, A. G. Gerasimova for help in carrying out the experiments, and the whole synchrotron crew of the Physics Institute of the Academy of Sciences." There are five figures and three tables.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva, Akademi nauk SSSR (Physics Institute, Academy of Sciences)

SUBMITTED: 28Nov63 DATE ACQ: 12Jun63

ENCL: 00

SUB CODE: PH

NR REF SOV: 007

OTHER: 008 .

Card

8/2/63

L 13620-63

EWI(m)/BDS AFETC/ASD

ACCESSION NR: AP3003098

S/0056/63/044/006/1780/1786

59
52

AUTHOR: Govorkov, B. B.; Denisov, S. P.; Minarik, Ye. V.

TITLE: Determination of nuclear dimensions from differential cross sections for neutral pion photoproduction

SOURCE: Zhurnal eksper. i teor. fiziki, v. 44, no. 6, 1963, 1780-1786

TOPIC TAGS: nuclear dimension, neutral pion photoproduction, angular distribution, cross section, amplitude

ABSTRACT: The results of neutral pion photoproduction are presented for a mean primary photon energy of 182 MeV. These data, along with the angular distributions of neutral pions obtained in earlier experiments for 154 MeV energy, are analyzed in order to obtain some parameters of the nucleon distribution in Be, C, Al, Cu, Cd, Ta, and Pb nuclei. The experimental apparatus and the setup of the experiments will be described elsewhere (ZhETF, in press). The results agree satisfactorily with the uniform model in the case of Cu, Cd, and Ta, which in the case of these metals coincide with the results of the trapezoidal model. The values obtained for the amplitudes can also be reconciled with the calcula-

Card 1/2

L 13620-63

ACCESSION NR: AP3003098

tions. "In conclusion the authors thank P. A. Cherenkov and A. M. Baldin for interest in their work, S. N. Sokolov and L. N. Shtarkov for helpful consultations on the analysis of the experimental data by the least-squares method, and also the cyclotron crew of the Physics Institute. We would also like to thank A. V. Kutsenko, P. N. Komolov, and the staff of the computing department of the Physics Institute for help with the calculations on the electronic computers." 7
Orig. art. has: 11 figures, 5 formulas, and 2 tables.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR
(Physics Institute, Academy of Sciences, SSSR)

SUBMITTED: 25Feb63date acq/ 23Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 003

OTHER: 006

Card 2/2

GOVORKOV, B.B.; DENISOV, S.P.; LEBEDEV, A.I.; MINARIK, Ye.V.; KHARLAMOV, S.P.

Photoproduction of neutral π^0 -mesons on 210 Mev. protons. Zhur.
eksp. i teor. fiz. 47 no.4:1199-1201 0 '64.

(MIRA 18:1)

1. Fizicheskiy institut imeni P.N. Lebedeva, AN SSSR.

L 13921-65 ENT(m)/T/ENA(m)-2 ESD(t) s/0056/64/047/004/1199/1201
ACCESSION NR: AP4047884

AUTHORS: Govorkov, B. B.; Denisov, S. P.; Lebedev, A. I.; Minarik, Ye. V.; Kharlamov, S. P.

TITLE: Photoproduction of neutral pions by protons at 210 Mev ¹⁹ _B

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47, no. 4, 1964, 1199-1201

TOPIC TAGS: photoproduction, neutral pion, gamma proton interaction, dispersion relation, photoproduction cross section

ABSTRACT: In view of its significance to a complete phase shift analysis and the information it can yield on the applicability of dispersion theory, the process $\gamma + p \rightarrow p + \pi^0$ was investigated and its differential cross section was measured for 6 meson emission angles at photon energy 210 ± 14 MeV in the laboratory system. The investigations were carried out in the bremsstrahlung beam of the

Card 1/3

L 13921-65
ACCESSION NR: AP4047884

2

FIAN 265-MeV synchrotron. The neutral pions were observed by counting the two decay γ quanta in coincidence. The apparatus used was described by the authors previously (ZhETF v. 44, 1463, 1963, except that a liquid hydrogen target was used in an ordinary glass Dewar with wall thickness 1 mm. The hydrogen capacity of the Dewar was 4 liters, so that continuous measurements could be made for 12 hours. The differential cross sections for the production of π^0 mesons from protons were calculated from the measured yield by the method described by Govorkov et al. (ZhETF v. 44, 878, 1963). Comparison of the results with those by others showed good agreement. In comparing the data with the cross sections calculated on the basis of the dispersion relation it is concluded that the data presented can be described within the framework of the bipion model without introduction of a subtraction constant in the $\gamma + \pi \rightarrow \pi + \pi \rightarrow N = \bar{N}$ channel. "The authors are grateful to A. M. Baldin for helpful discussions and R. S. Uvarov for assistance with the numerical calculations." Orig. art. has: 1 figure.

Card 2/3

L 13921-65
ACCESSION NR: AP4047884

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk
SSSR (Physics Institute, Academy of Sciences SSSR)

SUBMITTED: 15Apr64

ENCL: 00

SUB CODE: NP

NR REF SOV: 009

OTHER: 005

Card 3/3

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End

S/120/62/000/005/008/036
E039/E420

Determination of the efficiency ...

out on a beam of bremsstrahlung from the Physics Institute's synchrotron at 265 MeV. It is shown that the efficiency of a γ telescope rises steadily from a few % at 20 MeV to $\sim 40\%$ at ~ 150 MeV. Measurements of efficiency at two values of E_γ were made for other γ telescopes of similar construction and the results agreed within the statistical error. The variation of efficiency with thickness of the lead converter was also measured for $E_\gamma = 60.8$ MeV. A flat maximum at $\sim 20\%$ is obtained for a thickness of 8 mm. There are 4 figures.

ASSOCIATION: Fizicheskii Institut AN SSSR
(Physics Institute AS USSR)

SUBMITTED: December 25, 1961

Card 2/2

S/056/62/042/004/013/037
B163/102

AUTHORS: Govorkov, B. B., Denisov, S. P., Minarik, Ye. V.
TITLES: Elastic photoproduction of π^0 mesons on carbon at 155 Mev

PERIODICALS: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42
no. 4, 1962, 1010-1012

ABSTRACT: γ rays with an average energy of 155 Mev from the FIAN synchrotron were used to produce π^0 mesons in the reaction $\gamma + C^{12} \rightarrow C^{12} + \pi^0$. The angular distribution of the π^0 mesons was determined by coincidence measurements of the two decay γ quanta with two γ ray telescopes, each consisting of two conventional fluid scintillation counters with a 5 mm lead converter in front. The telescopes were arranged in a plane whose inclination against the primary γ beam determined the average angle of emission of the π^0 mesons recorded. The experimental differential cross section for the elastic photoproduction of π^0 mesons is in good agreement with

Card 1/2

S/056/62/042/004/013/037
B163/B102

Elastic photoproduction of...

theoretical values calculated in the impulse approximation under the assumption that protons and neutrons contribute equally to the coherent photoproduction, and that the distribution of nuclear matter in the C^{12} nucleus equals the charge distribution known from electron scattering experiments.

ASSOCIATION: Fizicheskiy institut im. P. N. Lebedeva Akademii nauk SSSR
(Physics Institute imeni P. N. Lebedev of the Academy of
Sciences USSR)

SUBMITTED: November 23, 1961

Page 2/2

L 11620-6)

DIT(m)/BDS AFVTC/ASD

8/056/63/044/003/018/053

54
53

AUTHOR:

Goverkov, S. B., Denisov, S. P., and Minerik, Ye. V.

TITLE:

Near threshold photoproduction of neutral mesons^M of nuclei

PERIODICAL:

Zhurnal eksperimental'noy i tekhnicheskoy fiziki, v. 44, no. 3,
1963, 575-586

TEXT: Earlier experiments by researchers of both the East and West showed that the photoproduction of mesons by quanta of energy up to 200 Mev is basically due to elastic coherent production. The present paper presents the measurement of the angular dependence of the π^0 -meson photoproduction cross section on Be, Al, Cu, Cd, and Fe nuclei for 154 Mev mean primary photon energies. The π^0 -mesons were observed by recording coincidences of $\pi^0 \rightarrow \gamma + \gamma$ decay γ -quanta with the aid of two scintillation telescopes. An analysis of the results obtained shows that the main contribution to the cross section is from elastic coherent photoproduction. A more detailed analysis of experimental results will be published at a later date. A. M. Baldin and A. I. Lebedev evaluated the theoretical implications of the experimental results. There are 8 figures.

Card 1/2