

ACC NR: AP7004046

errors of manometers can be computed and dimensions of the compensating elements determined. Orig. art. has: 6 figures and 4 formulas. [Author's abstract]

[KS]

SUB CODE: 13/SUBM DATE: none/ORIG REF: 003/SOV REF: 001/
OTH REF: 001/

Card 2/2

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3

DOMOKOS, Attila, dr.

Statistical and historical itinerant meeting held in Debrecen.
Stat szemla 41 no.8/9,880-885 Ag-S '63.

1. Editorial Office, "Statisztikai Szemle", Budapest.

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3"

DOMOKOS, Attila, dr.

"Methods and results of measuring labor productivity in collective farms" by H. Stegman. Reviewed by Attila Domokos. Stat Szemle 42 no.12:1279-1280 D '64.

1. Chief Contributor, "Statistikai Szemle."

~~DOMOKOS, Béla, Dr.~~

Significance of ventilation disorders in pediatrics. Gyermekgyogyaszat
8 no.5-6:129-140 May-June 57.

1. A László Korhas Körleménye.
(PEDIATRIC DISEASES)

ventilation discrd. (Hun))
(RESPIRATION

ventilation discrd. in child. (Hun))

FARANCZ, P.; DOMOKOS, B.

Influence of pyramidone and ACTH on experimental bacteremia. Kiserletes
orvostud. 10 no.4:353-359 Aug 58.

1. Laszlo Korhaz Budapest.

(AMINOFYRINE, eff.

on *Pseudomonas aeruginosa* bacteremia in rabbits (Hun))
(ACTH, eff.
same)

(SEPTICEMIA AND BACTEREMIA, exper.

Pseudomonas aeruginosa bacteremia, eff. of ACTH & amino-
pyrine in rabbits (Hun))
(PSUDOMONAS INFECTIONS, exper.

aeruginosa bacteremia, eff. of ACTH & aminopyrine in
rabbits (Hun))

DOMOKOSH, B. [Domokos, B]; LASLO, M. [Laszlo, M.]

Pathophysiological characteristics of dyspnea in pneumonia
and treatment of this type of respiratory disorder. Pedia-
tria 41 no.11:52-56 N'62
(MIRA 1724)

1. Iz gorodskoy infektsionnoy bol'nitsy "Laslo", Budapest.

BIRO, Iosif; TAMAS, Ghizela; KISS, Ervin; DOMOKOS, L.; PETER, M.; LASZLO, Ioan;
DOMOKOS, Clara

Evolution of resistance to antibiotics of the staphylococcal strain
isolated in recent years in Rumania. Microbiologia (Bucur) 6 no.1:58
Ja-F '61.

DOMOKOS, G

S/056/62/042/003/036/049
B102/B158AUTHORS: Vol'f, Yu., Domokos, G.TITLE: The reaction $\pi^- + p \rightarrow \Lambda^0 + K^0$ PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42,
no. 3, 1962, 871 - 874TEXT: The differential cross section of the reaction $\pi^- + p \rightarrow \Lambda^0 + K^0$ is calculated, when the exchange of K^0 "particles", as well as the radiation correction to the Green function

$$\Delta_1(q^2) = Q_{\mu\nu} / [M^2 - q^2 + \Pi(q^2)], \quad (1)$$

and the vertices are taken into account. $Q_{\mu\nu} = 1$ if the K^0 spin is zero, $Q_{\mu\nu} = g_{\mu\nu} - q_\mu q_\nu / M^2$ if it is 1. With

$$a_{s,v}(t) = -\frac{g_{s,v}}{4} (2\pi)^4 \frac{K(t)}{t} |\Gamma_{s,v}|^2 Q_{s,v}(t), \quad (3)$$

$$K(t) = \sqrt{(t + \Delta)^2 - 4m^2 t}, \quad \Delta = (m^2 - 1).$$

Card 1/3

S/056/62/042/003/036/049
B102/B138

The reaction $\pi^- + p \rightarrow \Lambda^0 + K^0$

$$Q_S = 1 \text{ if the } K' \text{ spin is 0 and } \omega_V = [t - 2(m^2 + 1)] \text{ if it is 1,}$$

$$\left(\frac{d\sigma}{d\Omega}\right)_S = \frac{G_S^2}{16(2\pi)^4} \frac{|p'| \gamma}{W |p| k_0 K(M^2)} [(M_\Lambda + eM_N)^2 - q^2] \frac{|F(q^2)|^2 |\Delta_{1S}^c|^2}{(M^2 - q^2)^2}, \quad (8a)$$

$$\frac{1}{\Delta_{1S}^c} = M^2 - q^2 + \frac{\pi(2\pi)^4 \gamma^2}{4M^4 K(M^2)} \left\{ \frac{M^2 - m^2 - 1}{M^2 K(M^2)} + \frac{K(M^2)}{M^4} - \frac{K(M^2)}{M^2(M^2 - q^2)} \right\};$$

$$\left(\frac{d\sigma}{d\Omega}\right)_V = \frac{G_V^2}{32(2\pi)^4} \frac{|p'| \gamma K(M^2)}{W |p| k_0 M^4} [(M_\Lambda + eM_N)^2 - q^2] (-q^2) |F(q^2)|^2 |\Delta_{1V}^c|^2, \quad (8b)$$

$$\frac{1}{\Delta_{1V}^c} = M^2 - q^2 + \frac{\pi(2\pi)^4 \gamma^2 K(M^2)}{64 M^4 V_0^2} \left\{ \frac{2(m^2 + 1) - M^2}{M^2} \left(\frac{M^2 - m^2 - 1}{K(M^2)} - \frac{K(M^2)}{M^2} \right) - \frac{K(M^2)}{M^2} \left(\frac{q^2 - 2(m^2 + 1)}{q^2 - M^2} \right) \right\}.$$

is obtained. The subscripts S and V refer to scalar and vectorial cases respectively.

$$g_S^2 = \gamma / K(M^2) \quad (7a)$$

$$g_V^2 = \frac{1}{4} \gamma K(M^2) \quad (7b),$$

Card 2/3

V

S/056/62/042/003/036/049
B102/B138

The reaction $\pi^- + p \rightarrow \Lambda^0 + K^0$

$W = p_0 + k_0$, the total energy in the c.m.s., $\epsilon = P_{\Lambda p} P_{K'}$, $P_{\Lambda p}$ - relative parity of Λ , p , $P_{K'}$ - 1 if K' is a scalar (0^+) or a pseudovector (1^+), $P_{K'} = -1$, if K' is a pseudoscalar (0^-) or a vector (1^-). $F(q^2)$ is the form factor of the vertex $p \bar{q} K'$, $\langle r^2 \rangle \approx (m+1)^{-2}$. The results make it probable that K' has spin one. There are 2 figures and 4 references: 1 Soviet and 3 non-Soviet. The three references to English-language publications read as follows: M. Alston et al. Phys. Rev. Lett., 5, 520, 1960; Chia Hwa Chan. Phys. Rev. Lett. 6, 383, 1961; A. Mirza et al. Phys. Rev. Lett. 6, 145, 1961; M. Gell-Mann, F. Zachariasen, Preprint Cal. Tech. 1961.

ASSOCIATION: Ob'yedinenyyj institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: October 10, 1961

Card 3/3

✓

S/056/62/042/002/035/055
B108/B104

DOMOKOS, G.

AUTHOR:

Domokos, G.

TITLE:

Behavior of the amplitude of high-energy elastic pion-pion scattering

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42,

no. 2, 1962, 538 - 542

TEXT: The imaginary part of the elastic scattering amplitude for neutral pseudoscalar unity-mass particles is calculated for high energies. The momentum transfer in the collisions is assumed to be small. This model may fit real pions since their isospin is not essential at high energies. The integral equation for the spectral functions (notations see S. Mandelstam, Phys. Rev., 112, 1344, 1958).

$$\text{Im } A_1(z_1, t) = \frac{-i}{4\pi^2} \sqrt{t-4} \int \int \frac{dz_2 dz_3}{\sqrt{k(z_1, z_2, z_3)}} \delta(z_1 - z_2 z_3 - \sqrt{(z_1^2 - 1)(z_3^2 - 1)}) \times$$

$\times A_1^*(z_3, t) A_1(z_2, t),$
where $z_0 = 1 + 8(t - 4)^{-1}$, is solved approximately for large s and small t:

Behavior of the amplitude of...

S/056/62/042/002/035/00
B108/B104

$$A_1(s; t) \sim sf(t)/12\pi^2\eta_1$$

$$f(t) = \frac{3}{\sqrt{t}(t-4)} \ln \frac{\sqrt{t-4}-\sqrt{t}}{\sqrt{t-4}+\sqrt{t}} \quad (t < 0).$$

Using the optical theorem one obtains $\sigma \sim (3\pi\eta_1)^{-1} = \text{const}$. These results are a good description of the two fundamental experimental facts, namely, constant total cross section and diffractive character of elastic scattering. The shape of the $f(t)$ curve is independent of energy. The results obtained by expansion into series with respect to z_2^{-1} and z_3^{-1} are exact up to logarithmic factors. V. S. Barashenkov, Yu. Vol'f, A. V. Yefremov, Professor Chu Hung-yuan, and Professor K. A. Ter-Martiro-syan are thanked for discussions. There are 1 figure and 8 references: 2 Soviet and 6 non-Soviet. The four most recent references to English-language publications read as follows: G. P. Chew, S. C. Frautschi. Phys. Rev. Lett., 5, 580, 1960 and Preprint UCRL - 9510, 1960; V. N. Gribov. Nucl. Phys., 22, 249, 1961; S. Mandelstam. Phys. Rev., 115, 1741, 1959.

Card 2/3

Behavior of the amplitude of...

S/056/62/042/002/035/055
B108/B104

ASSOCIATION: Ob'yedinenyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research). Central Scientific Research Institute of the Hungarian Academy of Sciences, Budapest (G. Domokosh)

SUBMITTED: August 12, 1961

Card 3/3

DOMOKOS, Gyorgy

Productivity investigation of the 1:10,000-scale topographic works. Geod kart 14 no.3:171-176 '62.

1. Osztalyvezeto mernok, KV.

HUNGARY/Nuclear Physics - Cosmic Rays.

C

Abs Jour : Ref Zmr Fizika, No 12, 1959, 26959
Author : Bozoki, G., Domokos, G., Fenyves, E., Gombosi, E.,
Lamius, K., Meier, H.W.
Inst Title : "High-Energy Investigation of Jets
Orig Pub : Magyar tud. akad., ^{Koz.} fiz. kutato int. kozl., (KFKI)
1958, 6, No 3, 105-116, III

Abstract : Results are presented on the investigation of high energy jets ($0 + 16 \alpha$), found in a stack of nuclear emulsions. The energy of the jet, determined by the angular distribution of the shower particles, was found to be 1.3×10^{13} ev. The angular distribution in the center of mass system differs considerably from isotropic and exhibits good agreement with the distribution expected on the basis of the Landau and Heisenberg theory. Three cases of secondary nuclear

Card 1/2

HUNGARY/Nuclear Physics - Cosmic Rays.

C

Abs Jour : Ref Zhur Fizika, № 12, 1959, 26959

interactions of shower particles were noted, and the energy and transverse momenta of these particles were estimated. On the basis of the measurement of the energy of the electron-positron pairs, found in a narrow cone formed by the jet particles, approximate estimates are made of the number, average momentum, and average transverse momentum of the neutral pions. A brief description is given of the experimental results obtained.

Card 2/2

- 32 -

DOMOKOS, Gabor

Highest-energy nuclear interactions. Fiz.szemle 8 no.3:76-81. Mrz
'58.

1. Kozponti Fizikai Kutato Intezet Kosmikus Sugarsasi Osztaly.

HUNGARY/Nuclear Physics - Installations and Instruments.
Methods of Measurement and Research

C

Abs Jour : Ref Zhur - Fizika, No 8, 1959, 17251
Author : Donokos, G.
Inst : Central Research Institute of Physics, Budapest, Hungary
Title : Production of Heavy Unstable Particles in Extremely Energetic Nucleon-Nucleon Collisions
Orig Pub : Acta phys. Acad. scient. hung., 1958, 9, No 1-2, 49-62

Abstract : The statistical theory of Belen'kiy-Landau is used to calculate the probabilities of production of heavy unstable particles. The decay temperature is estimated for K mesons and hyperons. For this purpose, a comparison is made of the effective cross sections of the $\pi\pi$ and $K\pi$ interactions at high energy. A rough estimate of the cross section of the $\pi\pi$ interaction is

Card 1/3

- 25 -

HUNGARY/Nuclear Physics - Installations and Instruments.
Methods of Measurement and Research

Abs Jour : Ref Zhur Fizika, No 8, 1959, 17251

obtained in the first non-vanishing approximation of perturbation theory on the basis of the PS (PS) variant of meson theory with application of the regularization procedure of Pauli-Villars. Analogous calculations have been carried out for the $K\pi$ interaction, and the operator of the interaction of the K meson field with the nucleon field is taken in the form $W = (\epsilon/n) (\psi \psi) (\bar{x}x)$, where ψ is the operator of the nucleon field and x is the operator of the k-meson field. Both cross sections are found to be of the same order of magnitude; it is therefore concluded that the decay temperature for heavy particles should be approximately the same as for pions. Next, on the basis of statistics of an ideal gas, the author calculates the number of particles of various types, produced upon collision of two protons. The laws of conservation of

Card 2/3

HUNGARY/Nuclear Physics - Installations and Instruments.
Methods of Measurement and Research

C

Abs Jour : Ref Zhmr Fizika, No 8, 1959, 17251

strangeness, of the number of variants, and of the z
component of the isotopic spin are taken into account.
The results obtained are compared with experiment.

Card 3/3

- 26 -

BOZOKI, Gyorgy; DOMOKOS, Gabor; FENYVES, Ervin; FRENKEL, Andor; GOMBOSI,
Eva; BEBEL, D.; LANIUS, K.; MEIER, H.W.

Further investigation of high-energy jet. Koz fiz kozl MTA 7 no.6:
(EEAI 9:8)
374-377 '59.

1. Kozmikus Sugarzasi Laboratorium, Kozponti Fizikai Kutato Intezet,
Magyar Tudomanyos Akademia (for Bozoki, Domokos, Fenyves, Frenkel,
Gombosi). 2. Nemet Tudomanyos Akademia Magfizikai Intezete,
Zeuthen (for Bebel, Lanius, Meier)
(Particles) (Photons) (Cascades)

DOMOKOS, Gabor

Some problems of multiple particle emissions. Koz fiz kozl MTA 7 no.6:
385-390 '59.

(E&AI 9:8)

1. Kozmikus Sugarzasi Laboratorium, Kozponti Fizikai Kutato Intezet,
Magyar Tudomanyos Akademia.
(Particles) (Nucleons)

DOMOKOS, Gabor

The electromagnetic structure of nucleons. Fiz szemle 9
no.7;206-208 Jl '59.

1. Koszponti Fizikai Kutato Intezet Kozmikus Sugarzasi Laboratoriuma.

DOMOKOS, Gabor

Remarks on a possible interpretation of experiments concerning nucleon structure. Fiz fiz kozl MTA 8 no.2/3:155-159 '60. (EEAI 10:4)

1. A Magyar Tudomanyos Akademia Kozponti Fizikai Kutato Intezete,
Kozmikus Sugarzasi Laboratorium,
(Nucleons)

DOMOKOS, G.

Simple nonlocalizable systems. Acta phys Hung 11 no.1:81-86 '60.
(EEAI 9:10)

1. Central Research Institute of Physics, Budapest. Presented
by L.Janossy.

(Oscillators) (Nucleons)
(Mesons) (Field theory)

DOMOKOS, G.

Behaviour of the pion-pion elastic scattering amplitude at high energies; neutral model. Dubna, Izdatel'skii otdel Ob"edineniia po in-ta iadernykh issledovaniii, 1961. 10 p.

1. On leave from the Central Research Institute for Physics,
Budapest, Hungary.

(No subject heading)

DOMOKOS, Gabor

The strong reciprocal structure of nucleons. *Fiz szemle* 11 no.4:
105-107 Ap '61.

1. KFKI Kozmikus Sugarzasi Laboratorium.

DOMOKOS, G.; SARANTSEVA, V.R., tekhn. red.

Simple approach to the determination of regge-poles. Dubna,
Ob"edinennyi in-t iadernykh issledovaniii, 1962. 3 p.

1. On leave from the Central Research Institute for Physics of the
Hungarian Academy of Sciences (i.e. Domokos).
(No subject heading)

DOMOKOS, G.

"High Energy Behaviour of Elastic Scattering Amplitudes of Pions
and Nucleons"

Report presented at the Intl. Conference on High Energy Physics, Geneva,
4-11 July 1962

Joint Inst. for Nuclear Research
Lab. of Theoretical Physics, Dubna, 1962

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3

DOMOKOS, G.; WOLF, J.; SARANTSEVA, V.R., tekhn. red.

Regge-poles and form factors. Dubna, Ob"edinennyi in-t iader-
nykh issledovani, 1962. 3 p.
(No subject heading)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3"

DOMOKOS, G.; SARANTSEVA, V.R., tekhn. red.

Analytic properties of the elastic $\pi\pi$ scattering amplitude
in the ℓ plane. Dubna, Ob"edinennyi in-t iadernykh issledovanii,
1962. 4 p.

(No subject heading)

DOMOKOS, G.

On the asymptotic behaviour of the elastic $\pi\pi$ and $\eta\pi$ scattering amplitude. Dubna, Ob"edinennyi in-t iadernykh issl. 1962.
5 p.

1. On leave from the Central Research Institute for Physics of the Hungarian Academy of Sciences (for Domokos).
(No subject heading)

DOMOKOSH, G. [Domokos, G.]

[Asymptotic behavior of the vertex part in the pseudo-scalar meson theory] Ob asimptoticheskem povedenii ver-shinnoi chasti v psevdoskaliarnoi mezonnnoi teorii. Dubna, Ob"edinennyi in-t iadernykh issledovanii, 1962. 6 p.

(MIRA 15:2)

1. Tsentral'nyy nauchno-issledovatel'skiy institut fiziki Vengerskoy Akademii nauk (for Domokosh).
(Potential, Theory of) (Mesons)

DOMOKOS, G.; SMIRNOVA, L.A.[translator]; SARANTSEVA, V.R., tekhn.
red.

Regge-poles and elastic scattering at high energies. Dubna,
Ob"edinenmyi in-t iadernykh issledovanii, 1962. 9 p.

1. On leave from the Central Research Institute for Physics of the
Hungarian Academy of Sciences, Budapest (for Domokos).
(No subject heading)

DOMOKOSH, G. [Domokos, G.]

Behavior of the ampolitude of elastic high-energy pion-pion scattering [with summary in English]. Zhur. eksp. i teor. fiz. 42 no.2:538-542 F '62. (MIRA 15:2)

1. Sotrudnik TSentral'nogo nauchno-issledovatel'skogo instituta fiziki Vengerskoy Akademii nauk, Budapesht. Ob'yedinennyi institut yardernykh issledovaniy.
(Mesons--Scattering)

S/020/62/144/006/011/015
B108/B102

AUTHOR: Domokosh, G.

TITLE: Analytic properties of the $\pi\pi$ elastic scattering amplitude
in the l-plane

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 144, no. 6, 1962, 1279-1280

TEXT: The author has shown recently (Ob'yedinen. inst. yadern. issled., Preprint D-900 (1962)) that the quantum mechanical results of T. Regge (Nuovo Cim., 14, 951 (1959)) can be generalized to field theory if the partial amplitude of $\pi\pi$ -scattering is meromorphic with respect to l. The integral equations (Chew-Mandelstam type) for the partial amplitudes are solved by iteration. It is shown that the amplitudes are meromorphic with respect to l in each step of iteration, and that the iteration is convergent. ✓

ASSOCIATION: Ob'yedinennyi institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

PRESENTED: April 2, 1962, by N. N. Bogolyubov, Academician

SUBMITTED: March 26, 1962

Card 1/1

S/020/62/145/001/011/018
B104/B102

AUTHOR: Domokosh, G.

TITLE: Calculation of the Regge poles

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 145, no. 1, 1962, 76-77

TEXT: The author uses symbols and results from one of his earlier papers (Ob'yedinen. inst. yadern. issled., Preprint, D-90C, 1960) and from a paper by C. Lovelace (Diffraction Scattering and Mandelstam Representation, Preprint, 1961) to calculate the distribution of a πN diffraction scattering. Satisfactory results are obtained for 5- and 7-Gev pions. Professor I. Ya. Pomeranchuk and D. V. Shirkov are thanked for valuable discussions.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

PRESENTED: April 2, 1962, by N. N. Bogolyubov, Academician

SUBMITTED: March 26, 1962

Card 1/1

DOPOKOSH, G. [Domokos, G.]; SHURANI, P. [Suranyi, P.]

Bound states and analytic properties in angular momentum.
Dubna, Ob"edinenmyi in-t iadernykh issledovani, 1963.
23 p. (MIRA 17:9)

DOMOKOS, G.

High energy scattering in systems with anomalous thresholds.
Acta physica Pol 24 no.3:345-350 S'63.

1. Joint Institute for Nuclear Research, Laboratory of Theoretical Physics, Dubna, U.S.S.R. On leave from the Central Research Institute for Physics, Budapest.

DOMOKOS, G.; SURANYI, P.

On the behaviour of Green functions at small distances.
Acta phys Hung 17 no.1/2;107-114 '64.

1. Joint Institute for Nuclear Research, Laboratory of
Theoretical Physics, Dubna U.S.S.R. Presented by
Z.Gyulai.

DOMOKOSH, G.; SHURAN'I, P.

Spontaneous disturbance of symmetries in quantum field theory.
IAd. fiz. 2 no.3t501-511 S '65. (MRA 18:9)

1. Ob'yedinennyj institut yadernykh issledovaniy.

ALMASI, Nicolae; SZOTYORI, Ladislau; DOMOKOS, Margareta

Reaction between sodium alkoxides and the α -halogen ketones. Pt. 3.
Studii cerc. chim. 13 no. 8/9: 567-580 Ag-S '64.

1. Laboratory of Organic Chemistry of the "Babeș-Bolyai" University,
11 Arany János Street, Cluj.

SZOTYORI, Ladislau; ALMASI, Nicolina; FEY, Ladislau; BARTOK, Margareta

Reaction between sodium alkoxides and the α -halogen ketones. Pt. 4.
Studii cere chim 13 no.8/9: 581-594 Ag.S '64.

I. Laboratory of Organic Chemistry of the "Babes-Bolyai" University,
11 Arany Janos Street, Cluj.

FAZAKAS, B., dr.; EABONITS, Magdalena, dr.; KERESTFLY, I., dr.; NICOARA, I., dr.;
PETER, M., dr.; DOMOKOS, L., dr.; INCZEFFY, Z., dr.; BOERIU, I., dr.;
KOCSIS, Sofia, dr.

Contribution to the study of the distribution of helminthiasis.
Microbiologia (Bucur.) 9 nr. 3:217-223 My-Je '64

1. Lucrare efectuata la Institutul de medicina si farmacie din
Tirgu-Mures — Disciplina de parazitologie, Clinica de boli infecioase si Inspectia Sanitara de stat a R.M.A.M.

DOMOKOSH, G. [Domokos, G.]; SHURANI, P. [Suranyi, P.]; SARANTSEVA, V. R.,
tekhn. red.

Three-particle states in the relativistic theory of complex
angular momentum. Dubna, Ob"edinennyi in-t iadernykh is-
sledovanii, 1963. 18 p.

1. On leave from the Central Research Institute for Physics,
Budapest (for Domokosh, Shurani).
(No subject heading)

DOMOKOSH, G.; ZUL'KARNEYEV, R.Ya.; NIKANOROV, V.I.

[Theory of complex angular momenta and high-energy physics] Teoriia kompleksnykh uglovykh momentov i fizika vysokikh energii. Dubna, Ob"edinennyi in-t iadernykh issled. 1963. 24 p.

(MIRA 17:7)

~~REF ID: A61247~~

IJP(c) GG

ACC NR: AP6001157

SOURCE CODE: UR/0367/65/002/003/0501/0511

AUTHOR: Domokosh, G. (Associate); Shuran'ti, P. (Associate)

ORG: Joint Institute of Nuclear Research (Ob"yedinennyj institut yadernykh
issledovaniy); Budapest Physics Institute, Hungary (Budapechtskij Institut fiziki)

TITLE: Spontaneous breakdown of symmetries in quantum field theory

SOURCE: Yadernaya fizika, v. 2, no. 3, 1965, 501-511

TOPIC TAGS: quantum field theory, mathematic analysis

ABSTRACT: The authors examine symmetry breakdown solutions in quantum field theory by means of functional methods. It is shown that if a normal solution is renormalizable, then a symmetry breaking solution is also renormalizable. The Goldstone theorem is proved for orthogonal symmetry groups. In the case of SU(3)-symmetry preferred direction in unitary space is uniquely determined by the self-consistency condition, i.e., it coincides with the hypercharge axis. The general procedure is illustrated by an example of a self-coupled scalar field. Approximate calculations are performed by means of a generalized diagram technique. A discussion is given on the validity of the Gell-Mann-Okubo mass formula independent of the perturbation theory. Some unsolved problems of a fundamental nature are indicated. Authors find it their pleasant duty to thank Prof. N. N. Bogolyubov and Prof. Jona-Lasinjo [Iona-Lasinio] for many interesting discussions on the subjects studied. Orig. art. has: 3 figures and 26 formulas.

33
P

Card 1/2

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3

L 13550-66
ACC NR: AP6001157

SUB CODE: 12, 13, 20 / SUBM DATE: 22Jan65 / OTH REF: 007

Card

2/2

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3"

LASLO, Ya. [Laszlo, I.]; PETER, M.; FILEP, D. [Filip. D.]; ABRAKHAM, Sh. [Abraham, A.]; BALINT, Ye. [Balint, E.]; DOMOKOSH, L. [Domocos, L.]; KASA, L. [Qasa, L.]; DERDI, P.; BEDE, Sh. [Bede, S.]

Experimental studies on epidemic hepatitis. Vop. virus. 8 no.2:
221-224 Mr-Ap'63
(MIRA 16:12)

1. Kafedra mikrobiologii i inframikrobiologii Mediko-farmatsev-
ticheskogo instituta Tyrgu-Muresh, Rumyniya.

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3

DOMOKOS, Gyorgyne

Calculation of cubic contents on the basis of average depths
or average parallaxes. Geod kart 16 no.3;171-174 '64.

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3"

DOMONIKOS, I. (Budapest, XI., Egry József u. 18-20)

Influence of alternating current arc light migration on
electrodes. Periodica polytechnica electr 6 no.4:247-270 '62.

1. Lehrstuhl für Hochspannungstechnik und -geräte an der
Technischen Universität, Budapest. Vorgelegt von Prof. Dr.
J. Eisler.

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3

BIRO, Logif; TAMAS, Ghizela; KISS, Ervin; DOMOKOS, L.; PETER, M.; LASZLO, Ioan;
DOMOKOS, Clara

Evolution of resistance to antibiotics of the staphylococcal strain
isolated in recent years in Rumania. Microbiologia (Bucur) 6 no.1:58
Ja-F '61.

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3"

DOMOKOS, S.

Properties of elastic scattering amplitudes of pions and
nucleons at high energies. Dubna, Cb"edinennyi in-t iader-
nykh issledovaniii, 1962. 4 p.
(No subject heading)

DOMOKOSH, G.; SHURANI, P.

Bound states and analytic properties in angular momentum.
Dubna, Ob"edinenyi in-t iadernykh issledovanii, 1961. 8 p.
(No subject heading)

DOMONKOS, J. and HUSZAK, I.

Chemical Abst.
Vol. 48 No. 3
Feb. 10, 1954
Biological Chemistry

The catalase activity of histamine- and antihistamine-hematin complexes. J. Domonkos and I. Huszak (M.-I. Univ., Szeged). *Acta Physiol. Acad. Sci. Hung.*, 4, 225-8(1953)(in German). — The addn. of 2 moles of histamine for each mole of hemin chloride in soln in pH 7.3 phosphate buffer increased the catalase-like activity of the hematin upon H_2O_2 . Addn. of Pyribenzamine reduced the catalase activity of the hematin. The presence of 5 moles of Pyribenzamine per mole of histamine-hematin complex (II) abolished the increased catalase activity of I. Addn. of 8 moles of histidine per mole of Pyribenzamine-hematin complex (III) restored the catalase activity of II to that of I. The pronounced effect of histamine upon hematin and its counteraction by Pyribenzamine suggested that the inhibition of the cytochrome activity of brain tissue by histamine (C.A. 47, 7004) was caused by the formation of a complex between histamine and the prosthetic group of the cytochromes. The catalase activity of I formed with free hematin might account for the harmful effect of increased levels of histamine *in vivo*. M. G. Horowitz

DOMOKOS, K.

Latero-axillary thoracoplasty. Tuberk. kardesei
5 no. 2:21-26 June 1951.

(CLM 25:5)

1. Doctor, Head Surgeon. 2. Matrahassai Hungarian State
Tubercular Sanatorium (Director - Head Physician --
Dr. Ander Lanyi).

PAULISTA MEDICA Sec 9 Vol. 9/10 Surgery Oct 55

5218. **DOMOKOS K.** A mátraházi Állami Tüdőbeteggyógyintézet közleménye.
* A tüdőresektionk utáni bronchussipolyokról. Bronchial fistulae after pulmonary resection MAG. SEBESZET 1954, 7/4 (304-308)
Illus. 2

The importance of an efficient surgical technique for closure of the bronchi is emphasized, the proof being that almost every writer on the subject reports more fistulae in his first 10 or 20 pulmonary resections than later. The clinical and roentgenological signs of bronchial fistulae are discussed and Overholts' method of suture is advised. In segmental resection simple ligation of the narrow bronchial branch is sufficient. Pneumonectomy is accompanied by simultaneous thoracoplasty

5218

and with lobectomy narrowing of the upper thoracic space is of great importance, especially in tb. The formation of residual cavities can with great probability be avoided by controlled suction, but should small cavities occur they can generally be closed by muscle plombage.

Marton - Budapest (IX, 15)

LASZLO, I.; PETER, M.; FILEP, V.; ABRAHAM, A.; BALINT, E.; DOMOKOS, L.;
KASZA, L.; PAAL, Gyorgyi; BEDO, A.

Experimental investigations of epidemic hepatitis. Attempts to isolate
the virus. Stud. cercet. inframicrobiol. 13 no.3:313-318 '62.
(HEPATITIS, INFECTIOUS) (TISSUE CULTURE)
(VIRUS CULTIVATION) (HEPATITIS VIRUSES)

ALMASI, Nicolae; SZOTYORI, Ladislau; DOMOKOS, Margareta

Reaction between sodium alkoxides and α -haloketones.
Pt.3. Rev chimie Roum 9 no.8/9:531-543 Ag-S '64.

1. Laboratory of Organic Chemistry, "Babes-Bolyai" University,
Cluj.

SZOTYORI, Ladislau; ALMASI, Nicolae; FEY, Ludovic; DOMOKOS, Margareta

Reaction between sodium alkoxides and α -haloketones. Pt.4.
Rev chimie Roum 9 no.8/9:545-558 Ag-S '64.

l. Laboratory of Organic Chemistry, "Babes-Bolyai" University,
Cluj.

DOMOKOS, Miklos

Some current theoretical and methodological questions of surveying
water resources development in Hungary. Hidrologiai kozlony 44 no.7:
285-299 Jl '64.

1. Scientific Research Institute of Water Resources Development,
Budapest.

DOMOKOS, Otto

The Kluge Blue Dyeing Plant in Papa; a valuable factory for
a museologist. Elet tud 15 no.13:355-359 20 Mr '60.

1. A soproni Liszt Ferenc Muzeum muzeologusa.

DOMOKOS, P.

"Dimaja." p. 457.

ETHNOGRAPHIA. (Magyar Neprajzi Társaság) Budapest, Hungary Vol. 69, no. 3, 1958.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 7, July 1959
uncla.

KALDOR, Istyan; DOMOKOS, Robert, dr.

Porphyria cutanea adultorum. Borgyogy. vener. szemle 38 no.6:284-286
D '62.

1. A budapesti Orvostudomanyi Egyetem Bor- es Nemikortani Klinikajának
(Igazgató Foldvari Ferenc dr. egyetemi tanár) kozlemenye.
(PORPHYRIA) (SYPHILIS) (ALCOHOLISM)
(ADENIDE NUCLEOTIDES)

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3

DOMOKOS, S.

Mihail Sadoveanu on his 75th birthday. p. 673. Vol 114, no. 11, Nov. 1955. TERVEZÉSI
ESZET ES TARSASÁDALÓ'. Budapest, Hungary.

So: Eastern European Accession. Vol 5, no. 4, April 1956

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3"

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3

REKUNOV, N.A.; MIKHAYLOV, A.D.; DOMOKUROV, I.A.; NAZMUTDINOV, R.Sh.; IGUSHKIN,
I.A.

SKS-8-59K seismic velocity logging station. Geofiz. razved. no.3:104-
109 '61.
(MIRA 17:2)

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3"

2344* Effect of Boron on Electric Conductivity of Ingot Aluminum and of Refined Metal. (Russian) A. N. Kuznetsov
and R. K. Vasil'ev. Acta Technica Academiae Scientiarum Ussuriensis, v. 4, nos. 1-2, 1953, p. 119-181.

Presents measurements of electrical conductivity of boron-treated aluminum and of ordinary ingot aluminum with B up to 0.05% and 0.1%. Discusses mechanism of refining with B graphs.

S/080/60/033/009/002/021
A003/A001

AUTHORS: Domon', A., Likhtenberger, E.

TITLE: Some Results of the Investigation Into the Structural Transformation and the Properties of the Oxide Film on the Surface of Aluminum

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol. 33, No. 9, pp. 1940-1951

TEXT: The behavior of oxide films contacting and not directly contacting with aluminum was studied on the transformation of a film of bayerite on the metal surface into bemite in an aqueous medium. In the experiments 99.5% pure Al with a 94% content of active metal and a grinding degree of 100 according to DIN, and a powder of hydrargillite with a grinding degree of 100 according to DIN were used. It was shown that the structural transformations of the various oxide films formed on the surface of aluminum depend not only on the conditions of the outer medium (especially on the temperature), but also on the aluminum ions diffusing from the metal. The effect of the aluminum ions is explained by the structural transformation of the protective layer formed on the surface of aluminum in an aqueous medium at a temperature below 100°C, and under high

Card 1/2

S/080/60/033/009/002/021
A003/A001

Some Results on the Investigation Into the Structural Transformation and the
Properties of the Oxide Film on the Surface of Aluminum

pressure in the case of high temperature it differs from the behavior of oxyhydrates not contacting with the metal. The same fact is observed in the structural transformation of an amorphous oxide film obtained by anode oxidation. The presence of aluminum ions diffusing from the metal causes the formation of thermodynamically less stable oxyhydrates on the surface of aluminum metal. There are 17 figures, 8 tables and 20 non-Soviet references.

ASSOCIATION: Issledovatel'skiy institut tsvetnykh metallov (Research Institute
of Non-Ferrous Metals), Budapest

SUBMITTED: February 9, 1960

Card 2/2

NEAGU, Eduard, ing., correspondent; DUMULESCU, Mclise, correspondent; DOMONDI,
Ioan, correspondent; HARICA, Gheorghe, correspondent.

Improvement of the organization of the work. Constr Bus 16
no.767:3 19 Sept '64.

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3

DOMONKOS, Erica

"Information retrieval and machine translation." Reviewed by
Erica Domonkos. Studii cerc mat 15 no. 1:143-145 '64.

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3"

S/035/62/000/003/027/053
A001/A101

AUTHOR: Domonkos, G.

TITLE: Theory and practice of photogrammetric measurements of parallax

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 3, 1962, 14,
abstract 3G120 ("Epítőipari és közlek. műsz. egyet. tud. közl.",
1961, v. 7, no. 2, 173-184, Hungarian; Russian, German, English,
French and Spanish summaries)

TEXT: The author describes the fundamentals of stereophotogrammetry.
Determination of longitudinal parallax is given; a connection is shown between
longitudinal parallaxes and heights of locality points; demands for the accuracy
of their measurement are presented. Practical methods of measuring parallaxes
are described (using contact imprints and scale rulers, mirror-lens stereoscopes
with micrometer and stereocomparators) which are employed in engineering surveys. ✓

I. M.

[Abstracter's note: Complete translation]

Card 1/1.

DOMONIKOS.

HUNGARY

SZARVAS, F., BENKO, S., TIBOLDI, T., MACHER, A., DOMONIKOS, O.; Medical University of Szeged, I. Medical Clinic and Agricultural Department of the City Council of Szeged (Szegedi Orvostudomanyi Egyetem I. sz. Belgyogyaszati Klinikaja es Szeged Varosi Tanacs Mezogazdasagi Osztalya).

"Investigations on the Effect of Rowaskleron on Chickens With a Quantitative Cholesterol Intake."

Budapest, Kiserletes Orvostudomany, Vol XV, No 3, June 1963, pp 244-249.

Abstract: [Authors' Hungarian summary] Atherosclerosis was induced on young cocks with a method suitable for a quantitative intake of cholesterol. The developing hypercholesterolemia, hyperlipemia and increase of β -lipoprotein was greatly reduced by Rowaskleron which contains terpenes. The treated group showed a macroscopically observable difference in the sclerosis of the thoracic aorta and fatty degeneration of the liver. The increase of the serum bilirubin level observed in the control group, was not found among animals treated with Rowaskleron. The data are insufficient for the determination of the mechanism of action but point to the role of the liver. 1 Hungarian, 10 Western references.

X/1

HUSSAK J. and DOMONKOS J. Szegedi Tudomanyegyetem Agykutato Intezete-nek Kozlemelye. Adatok a neuro-allergias megbetegedeseik kortanahoz Contribution to the pathology of neuro-allergic diseases Orv. Hetil. 1949, 90/24 (739-742) Tables 1

The central nervous system does not contain histidinedecarboxylase and histaminase. It is supposed that histamine does not play an essential role in the metabolism of the CNS. If the CNS necessitates histamine for its function, this is acquired from other organs through the blood circulation. It is established in experiments with the supravital cerebral substance (reaction of Pauly) that the histamine action can be offset only in medullary suspension. In cortical suspension this phenomenon has been very slight.

De Lehoczky - Budapest (VIII, 2,5,6)

So: Neurology & Psychiatry Section VIII, Vol. 4, No. 1-6

DOMOKOS, J.; KELEMEN, B.

Clinical and animal experiments on the prevention of vomiting and of bone marrow damage due to nitrogen mustard by the use of pyridoxin and choline, respectively. Orv.hetil. 91 no.23:712-714 4 Je '50.
(CLML 19:3)

1. Clinic for the Diagnosis of Internal Diseases (Director -- Dr. Be-la Purjeasz) Szeged University.

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3

DOMONKOS, J. 1951

(Gehirnforsch.-Inst., U. of Szeged)

"Effects of Antihistaminics on Tissue Respiration"

Acta Physiol. (Budapest), 1951, 2/1 suppl.(50)
No abst. in Exc. Med.

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3"

*CR**DOMONKOS, J.**116*

Pathology of neuro-allergic tissue reactions. I. The allergic nerve-tissue reaction and the intensity of histamine decomposition in the various parts of the nervous system
I. Huzák and J. Domonkos (Univ. Szeged, Hung.). Z. Vitamin-, Hormon- u. Fermentforsch., 4, 34-42 (1951) (in German).—Histidine decarboxylase and diaminooxidase (histaminase) are not present in horse or cat brain brain. The marked decompr. of histamine in the white matter of the central nervous system appears to be mediated as a secondary reaction by peroxides arising from oxidation of other substances. The decompr. of histamine in the grey matter is slight. II. Oxidation of histamine in the central nervous system. *Ibid.* 137-48.—The substances which form the peroxides responsible for histamine oxidation are identified as unsatd. fatty acids. Histamine is easily oxidized in the model system Na linoleate + Cu⁺⁺ and in the biol. system Na linoleate + soya lipoxidase. Conversely, histamine and putrescine and to a slight extent ethylamine (but not ephedrine, tyramine, and spermine) promote the autoxidation of the unsatd. fatty acids. This secondary oxidation of histamine is considered to be a body defense mechanism.
Erich Hirshberg

DOMONKOS, J.:HUSZAK, I.

Mode of action of antihistaminics. Kiserletes orvostud. 4 no. 4:
280-284 Aug 1952.
(CIML 23:5)

1. Brain Research Institute of Szeged Medical University.

KONYVICS-KOLONIVS, L.; TASS, G.; DOMOKOS, J.; HUSZAK, I.

Antihyaluronidase contents of the blood serum in multiple sclerosis.
Orv. hetil. 93 no. 48:1371-1373 30 Nov 1952. (CLML 24:1)

1. Doctors. 2. Neurological and Psychiatric Clinic, Szeged Medical
University.

DOMONKOS, J.; HUSZAK, I.

Effect of antihistamine substances on brain respiration. Acta physiol.
hung. 4 no.1-2:25-30 1953. (CLML 25:1)

1. Of the Institute of Brain Research of Szeged University.

V. Catalase activity of histamine and antihistamine-NaEDTA complexes

J. Hromádková and L. Hruščák, (444) *Physiol. Acad. Sci. Prague*, 1959
A 25% (w/v) solution of NaEDTA (1 mol/l) increases the catalase activity of haemin chelate at pH 7, whereas pyridoxine depresses it. Both effects are attributed to formation of complexes. (Received 19. 1. 1960) A. B. L. Hruščák

"APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3

J. DOMOKOS.

"Connection Between Innovations and the Plan to Reduce Prices." p. 11
(Ujito Lapja. Vol. 5, no. 13 July 1953 Budapest.)

Vol. 2, no. 9
SO: Monthly List of East European Accessions./Library of Congress, Sept 1953, Uncl.

APPROVED FOR RELEASE: 07/19/2001

CIA-RDP86-00513R000410920002-3"

DOMONKOS, J.

"Fight for the "home" 300-kilometer mark" p. 8; "From the history of Hungarian aviation; a new generation at Rakos." (To be contd.) p. 9; "Results of the 1st National Parachutist" p. 12, (REPULES, Vol. 6, No. 18, Sept. 1953, Budapest, Hungary)

SO: Monthly List of East European Accessions, L.C., Vol. 2, No. 11, Nov. 1953, Uncr.

DOMONKOS, J.

HUSZAK, I.; TASS, G.; KONYVES-KOLONICS, L.; DOMONKOS, J.

The effective group of antihyaluronidase in blood. Acta physiol.
hung. 6 no.1:1-9 1954.

Hirnforschungs Institut der Medizinischen Universität, Szeged.

(PROTAMINES, eff.

on heparin-hyaluronidase system)

(ANILINE DYES, eff.

toluidine blue on heparin-hyaluronidase system)

(HYALURONIDASE, antagonists

antihyaluronidase in blood, eff. of heparin, protamine
& toluidine blue)

(BLOOD

antihyaluronidase, eff. of heparin, protamine &
toluidine blue)

(HEPARIN, eff.

on antihyaluronidase in blood, eff. of protamine &
toluidine blue)

DOMONKOS, J.; TASS, G.; KONIVES-KOLONICS, L.; HUSZAK, I.

The effect of ion milieu on antihyaluronidase in blood. Acta physiol. hung. 6 no.1:11-18 1954.

1. Hirnforschungsinstitut der Medizinischen Universität, Szeged.
(ELECTROLYTES, in blood
eff. on antihyaluronidase in blood)
(HYALURONIDASE, antagonists
antihyaluronidase in blood, eff. of electrolytes)
(BLOOD
electrolytes, eff. on antihyaluronidase)

DOMONKOS J.

HUSZAK, Istvan; KONYVES-KOLONICS, Lasslo; DOMONKOS, Jeno; TASS, Gyula

Effect of ion milieu on blood antihyaluronidase. Kiserletes
orvostud. 6 no.5:403-408 Sept 54.

1. Szegedi Orvostudomanyi Egyetem Ideg-es Elmaklinika
(HYALURONIDASE, antagonists
antihyaluronidase in blood, eff. of electrolytes)
(ELECTROLYTES, eff.
on antihyaluronidase in blood)
(BLOOD
antihyaluronidase, eff. of electrolytes)

DOMONKOS, Jeno; TASS, Gyula; KONYVES-KOLONICS, Laszlo; HUSZAK, Istvan

Effect of ion concentration on blood antihyaluronidase. Kiserletes
orvostud. 6 no.5:409-413 Sept 54.

1. Szegedi Orvostudomanyi Egyetem Agykutato Intezete.

(HYALURONIDASE, antagonists

antihyaluronidase in blood, eff. of electrolytes)

(ELECTROLYTES, eff.

on antihyaluronidase in blood)

(BLOOD

antihyaluronidase, eff. of electrolytes)

DOMONKOS, J.

"Lessons from my distance flight." p. 8.
"Hungarian aircraft engine designers; Geza Kolbanyi." p. 9.
"Pictorial report on junior gliding." p. 10.
Repules, Budapest, Vol. 6 (i.e. 7), No. 11, June 1954.

SO: Eastern European Accessions List, Vol. 3, No. 11, Nov. 1954, L.C.

HUNG.

The antihyaluronidase content of the serum in multiple sclerosis. E. Konyves-Kolomos, Gy. Tass, J. Demonton and I. Horvath (Univ. Szeged, Hung.). *Mitteilungen der Gesellschaft für Immunologie und Allergie*, 128, 183-5 (1954) (in German). The antihyaluronidase (AH) content of blood serum, detd. by the method of Haas (C.A. 40, 37859), was lower in most of 1 patients with active multiple sclerosis (m.s.) than in 5 patients with chronic or slowly progressing m.s. Most of the values in m.s. patients were within the wide range found in control subjects. Warren M. Sperry.

KOMORNÍKOS, J.

KOMORNÍKOS, J. Farkashegy-Miskolcs-Farkashegy, 320 km. p. 7.
Tushino. p. 8.
Test of strength in Bulgaria. p. 10.
Our friends' new planes. p. 12.

Vol. 3, No. 16, Oct. 1955.

REFUGEE

TECHNOLOGY

Budapest, Hungary

Re: East European Accession, Vol. 5, No. 5, May 1956

✓ Activity of serum antihyaluronidase in multiple sclerosis.
J. Tiss, L. Kónyves-Kolánics, J. Domokos, and I. Huszár (Univ. Szeged, Hung.). *Mémoires Psychiat. Neurol.* 112, 233-40 (1950) (in German).—In an active stage of multiple sclerosis the active part of the serum antihyaluronidase (I) is reduced while it increases in a reparative or stationary phase. The varying I activity concomitant with the varying stages of multiple sclerosis are related to alteration of serum electrolytes. The levels of I activity are raised *in vivo* by $MgSO_4$.

C. R. Addinall

DOMONKOS, J.

A variometer with full energy.

P. 16 (REPULES) Budapest, Hungary Vol. 7, No. 3, June 1957.

SO: Monthly Index of East European Acessions (AEEI) Vol. 6, No. 11 November 1957.

EXCERPTA MEDICA Sec 2 Vol 12/7 Physiology July 59

2790. CARBOHYDRATE METABOLISM IN RED AND WHITE MUSCLE - Zum Kohlenhydratstoffwechsel des roten und weissen Muskels - Domonokos J. and Latzkovits L. Gehirnforsch. Inst., Med. Univ., Szeged - ACTA PHYSIOL. ACAD. SCI. HUNG. 1958, 14/4 (38-39)

- The oxygen consumption of red muscle is twice to 3 times that of white muscle. White muscle produces much lactic acid aerobically but red muscle produces little or none. When equal parts of the 2 muscle types are mixed, the aerobic lactic acid production of the white muscle is decreased. Red muscle has a higher consumption of lactic and pyruvic acids than white. It was previously shown by the authors that the glycolytic system of cerebral tissue is pH-sensitive, and the same phenomenon has now been observed with muscle. The aerobic lactic acid production of white and red muscle is considerably increased at alkaline pH, whereas pyruvic acid production at alkaline pH to a considerable degree in white muscle only, being minimal or absent in red muscle. Glycogen utilization rises at alkaline pH in a similar manner but not to the same degree in both muscle types. In a mixture of equal parts of red and white muscle at alkaline pH, the production of pyruvic acid - and to some extent also that of lactic acid - by the white muscle approaches the value found with red muscle alone.

CZECHOSLOVAKI./Physical Chemistry. Electrochemistry.

D

Abstr Jour: Ref Zhur-Khim., No 5, 1959, 14800.

Author : Santavy F., Janbor B., Dononkos J.

Inst :

Title : Polarographic Study of Stipitate and Puberule Acids.

Orig Pub: Chem. listy, 1958, 52, No 3, 419-424.

Abstract: Polarographic waves of stipitate and puberule acids have been studied in buffer solutions with pH 2.9 - 10.9 in the presence and absence of H_3BO_3 additions. The characteristic of the waves and their pH dependence correspond to the dissociation processes of the examined acids, apparently to the separation of the OH-group. The assumption that the 7-member ring of both acids possesses an aromatic

Card : 1/2

EXCERPTA MEDICA Sec 8 Vol 12/5 Neurology May 59

2312. THE BEHAVIOUR OF THE ELECTROLYTE CONTENT OF THE SERUM DURING ARTIFICIAL FEVER REACTIONS IN PATIENTS SUFFERING FROM MULTIPLE SCLEROSIS - Über das Verhalten des Elektrolytgehaltes des Serums während der künstlichen Fieberreaktion von Sclerosis multiplex-Kranken - Domonkos J., Heiner L. and Huszák I. Neurol.-Psychiat. Klin., Med. Univ., Szeged, Ungarn - PSYCHIAT. ET NEUROL. (Basel) 1958, 136/1-2 (109-116) Graphs 1 Tables 1

During periods of fever, artificially induced by milk-injections, there is an observable reduction of antithyaluronide activity at 38°C. This can be related to changes in the electrolytic structure, and principally to the diminished Mg-content. With cases of sclerosis polynsularis the Mg-reduction produced by fever is on an average more pronounced than with controls. During the fever reaction there is no significant change in the other biological ions.

COUNTRY	:	Czechoslovakia	B-12
CATEGORY	:		
ABC. JOUR.	:	RZKhim., No. 1959,	No. 85512
AUTHOR	:	Santavy, F.; Jambor, B.; Domonkos, J.	
INST.	:		
TITLE	:	Polarographic Analysis of Stipitatic and Puberulic Acid.	
ORIG. PUB.	:	Collect. Czechosl. Chem. Commun.	1959, 24, No 3, 896-902
ABSTRACT	:	See RZhKhim, 1959, No 5, 14800.	

CARD:

33

DOMONKOS, Jeno

Cooled glass homogenizer of a new type (Potter's homogenizer). Kiserl.
orvostud. 13 no.6:665-666 D '61.

1. Szegedi Orvostudomanyi Egyetem Ideg- es Elmekortani Klinikaja es
Agykutato Intezete.

(HISTOLOGICAL TECHNIQUES supply)

DOMOKOS, J.

Electrostatic paint-spraying equipment. Periodica polytechn eng 4
no.3:323-332 '60. (EEAI 10:6)
(Spray painting) (Electrostatics)

WALDSCHUTZ, Hans, dr.; DOMONKOS, Jozsef, dr. [translator]

Development and significance of petroleum and natural gas industries
in the framework of the Austrian power economy. Magy kem lap 17
no.1:19-22 Ja '62.

1. Fachverband der Erdölindustrie Österreichs (for Waldschutz).
2. Magyar Ásványolaj és Földgáz Kísérleti Intézet (for Domonkos).

(Austria—Petroleum)
(Austria—Gas, Natural)