

KESZLER, Pal, dr.; SZECSEI, Istvan, dr.

Operated case of multiple expansile lung cyst in adult. Orv.
hetil. 98 no.22:604-606 2 June 57.

1. A Budapesti Orvostudományi Egyetem Sebesztovábbképző
Klinikájának és a János Kórház Rendelőintézet (igazgató:
Bakács, Tibor, dr.) II. Tüdőosztályának (főorvos: Szecsei, Istvan,
dr.) közleménye.

(LUNGS, cysts

multiple expansile pneumatocele in adult, surg. (Hun))

KESZLER, Pal, Dr.; SARLOS, Pal, Dr.

Significance of tracheotomy in lung surgery and in the control of post-operative pulmonary complications. Orv. hetil. 99 no.48:1679-1682 30 Nov 58.

1. A Budapesti Orvostudományi Egyetem III. sz. Sebészeti Klinikájának (igazgató: Rubanyi Pal, dr. egyet. tanár) közleménye.

(TRACHEA, surg.

tracheotomy in control of postop. cardioresp. compl. in thorax surg. (Hun))

(THORAX, surg.

postop. cardioresp. compl., control by tracheotomy (Hun))

KESZLER, Pal, dr. kandidatus; NADASI, Antal, dr.

Significance of ergospirometry in the determination of resistance to surgical trauma. Tuberkulosis 12 no.9:193-197 S '59.

1. A Budapesti Orvostudományi Egyetem III. sz. Sebészeti Klinikájának
(igazgató: Ribanyi Pal dr. egyet. tanár) közleménye.
(RESPIRATION funct tests)
(SURGERY OPERATIVE)

FORGACS, Istvan, dr.; KESZLER, Pal, dr.; SARLOS, Pal, dr.

Significance of the measurement of spontaneous ventilation prior to extubation. *Magy.sebeszet* 13 no.5:341-345 0 '59.

1. A Budapesti Orvostudományi Egyetem III. sz. Sebeszeti Klinikájának közleménye Igazgató: Rubanyi Pal dr. egyetemi tanár.

(RESPIRATION physiol.)
(ANESTHESIA INTRATRACHEAL)

NADASI, antal, dr.; KESZLER, Pal, dr.; SZEKELY, Otto, dr.; HEID, Jozsef, dr.

Prolonged artificial respiration in the treatment of postoperative respiratory insufficiency. Orv.hetil. 101 no.38:1336-1340 18 S '60.

1. Budapesti III. sz. Sebészeti Klinika és Orsz. Traumatológiai Intézet.

(THORAX surg.)

(RESPIRATION, ARTIFICIAL)

KESZLER, Pal, dr.; NADASI, Antal, dr.; SARLOS, Pal, dr.

The operative approach in resection of the lungs. Axillary approach. *Magy.sebeszet* 13 no.5:287-292 O '60.

1. A Budapesti Orvostudományi Egyetem III. sz. Sebeszeti Klinika-
jának közleménye Igazgató: Rubanyi Pal dr. egyetemi tanár.
(PNEUMONECTOMY)

KESZLER, Pal, dr.; FLORIAN, Ede, dr.

Generalized actinomycosis with recovery. Orv.hetil. 101 no.43:
1540-1543 23 0 '60.

1. Budapesti Orvostudományi Egyetem, III sz. Sebészeti, Bor- és
Nemikortani Klinika.
(ACTINOMYCOSIS ther)

KESZLER, Pal, dr.; TEMESVARI, Antal, dr.

Simultaneous commissurotomy and pneumonectomy for mitral stenosis and bronchial carcinoma. Tuberkulózis 14 no.1:12-14 Ja '61.

1. A Budapesti Orvostudományi Egyetem III sz. Sebészeti Klinikájának (igazgató: Rubanyi Pal dr. egyet. tanár) és az Országos Kardiológiai Intézet (igazgató: Gottsegen György dr. egyet. tanár) közleménye.

(MITRAL STENOSIS surg)
(PNEUMONECTOMY)
(CARCINOMA BRONCHOGENIC compl)

KESZLER, Pal, dr.

Bjork's osteoplastic apical thoracoplasty. Tuberkulozis no.8:232-235
Ag '62.

1. A Janos Korhaz Rendelointezet (Igazgato: Tako Jozsef dr.)
Mellkassebeszeti osztalyanak (Foorvos: Keszler Pal dr., az
orvostudomanyok kandidatusa) kozlemenye.
(THORACOPLASTY)

KESZLER, Pal, dr.; LEITNER, Eva, dr.

Simultaneous pericardial cyst and diaphragmatic hernia. Magy. sebesz.
16 no.1:77-80 Mr '63.

1. A Budapesti Janos Korhaz (igazgato foorvos: dr. Tako Jozsef)
Melkassebeszeti Osztalyanak (foorvos: Keszler Pal dr. az orvostudomanyok
kandidatusa) kozlemenye.

(DIAPHRAGMATIC HERNIA) (CYSTS) (PERICARDIUM)
(SURGERY, OPERATIVE)

NADASI, Antal, dr.; KESZLER, Pal, dr.; SZOTS, Istvan, dr.; SLAJKO, Janos, dr.

Great decrease in the respiratory surface following pneumonectomy.
Tuberkulózis 16 no.3:77-79 Mr '63.

1. A Budapesti Orvostudományi Egyetem II. sz Sebészeti Klinikájának
(Igazgató: Rubanyi Pal dr. egyetemi tanár) közleménye.
(RESPIRATORY INSUFFICIENCY) (PNEUMONECTOMY) (EMPHYEMA, TUBERCULOUS)
(TRACHEOTOMY) (BRONCHOPNEUMONIA) (PNEUMOTHORAX)
(BRONCHIAL FISTULA)

KESZLER, Pal, dr; POPOLCZY, Antal, dr.; KOZMA, Andor, dr.; FISTER, Tiborc, dr.

Spontaneous pneumothorax, based on 125 cases. Orv. hetil. 104, no.9:
367-391 3 Mr '63.

1. Janos Korhaz es Rendelointezet, Melkassobeszeti Osztaly.
(PNEUMOTHORAX) (EMPHYEMA, TUBERCULOUS) (THORACOPLASTY)
(PNEUMONECTOMY) (DRAINAGE)

KESZLER, Pal, dr.; ERDELYI, Laszlo, dr.

On intrathoracic round shadows. Tuberkulozis 16 no.7:193-197
Jl '63.

1. A Janos Korhaz (igazgato: Tuko Jozsef dr.) Melkassebeszeti
osztalyanak (foorvos: Keszler Pal dr., az orvostudomanyok
kandidatusa) es a Belugyminiszterium egyeszegugyi szolgaltatanak -
kozlemenye.

(TUBERCULOSIS, PULMONARY) (LUNG NEOPLASMS)
(BRONCHIAL NEOPLASMS) (LUNG ABSCESS)
(DIAGNOSIS, DIFFERENTIAL)

KESZLER, Pal, dr.

Recent experiences in the treatment of postoperative respiratory distress. Magyar szemesz. 17 no.4:236-242 Aug '64.

1. Janos Korhaz Mellkassebeszeti osztalya. (Forvos: Keszler Pal dr.).

KESZLER, Pal, dr.; HUTAS, Imre, dr., PINTER, Endre, dr.; PAPOLCZY,
Antal, dr.

Late functional results of pulmonary resection in childhood.

Orv. hetil. 105 no.14:631-635 5 Ap'64

1. Janos Korhaz, Mellkassebeszeti Osztaly, Legzesfunctio
Laboratorium es Budapesti Orvostudomanyi Egyetem, IV.Se-
beszeti Klinika.

*

KESZLER, Pal, dr.; PINTER, Endre, dr.

Late results of operations performed for bronchiectasis in
children. Orv. hetil. 105 no.14:627-630 5 Ap'64

1. Janos Korhaz, Mellkassebeszeti Osztaly es Budapesti Or-
vostudomanyi Egyetem, IV. Sebeszeti Klinika.

✱

KESZLER, P.; BACSA, P.; KONYA, L.

On external cardio massage. Orv. hetil. 105 no.30:1436-1437
26 J1'64

KESZLER, Pal, dr.; SIMKO, Istvan, dr.

Pectus excavatum. Orv. hetil. 106 no.23:1073-1077 6 Je '65

1. Janos Korhaz, Mellkassebeszeti Osztaly (foorvos: Keszler, Pal, dr.) es a Szabadsaghogyi Allami Gyermekszanatorium, 5. Osztaly (foorvos: Simko, Istvan, dr.).

KESZTELE, V.

Experiences with therapy of various tuberculosis forms. Prakt.
Artzt 4 no.43:762-765 15 Dec 50. (CJML 20:6)

1. Of the General Municipal Hospital in Linz-on-the-Danube.

egyetem, I. DEKRETIUMOK.

"Urinary Excretion of 17-Ketosteroid, 17-Hydroxycorticoid and
Aldosterone of Polycythemic Patients."

Approved for Release: 09/17/2001 CIA-RDP86-00513R000721610017-6
Abstract: [Authors' Hungarian summary] In the introduction, the authors
summarize the theories concerning the pathogenesis of polycythemia
vera. The method, by which the 17-ketosteroid, 17-hydroxycorticoid
and aldosterone excretion was determined on 10 patients, is described.
Nine patients showed an elevated excretion of 17-ketosteroid while
the 17-hydroxycorticoid excretion was elevated in all cases. Based
on their results, the role of the neuroendocrine system is proposed
in the disease. No new evidence was obtained for the influence of
the neuroendocrine system on the erythropoietic factor. 1 Hungarian,
18 Western references.

[1/1

Abstract: [Authors' Hungarian summary] In the introduction, the authors
summarize the theories concerning the pathogenesis of polycythemia
vera. The method, by which the 17-ketosteroid, 17-hydroxycorticoid
and aldosterone excretion was determined on 10 patients, is described.
Nine patients showed an elevated excretion of 17-ketosteroid while
the 17-hydroxycorticoid excretion was elevated in all cases. Based
on their results, the role of the neuroendocrine system is proposed
in the disease. No new evidence was obtained for the influence of
the neuroendocrine system on the erythropoietic factor. 1 Hungarian,
18 Western references.

KESZTHELYI, J.

Portable belt-compressor of new design. Magyar. radiol. 10 no.1:
59 Mar 58.

1. Szovetseg utcai Korhaz Rendelointezet (igazgato: Fekete Sandor dr.
az orvostudományok doktora) röntgenosztálynak (főorvos: Ragalyi
Geza dr.) közleménye.

(URINARY TRACT, radiography

belt-compressor for Bucky's tables, portable new de-
sign (Hun))

BURGER, Tibor, dr.; KESZTHELYI, Bela, dr.; PEER, Janos, dr.

Pathological significance of blood volume changes in untreated polycythemia vera and after P32 therapy. Orv. hetil. 103 no.8:357-360 25 F '62.

1. Pecsí Orvostudományi Egyetem, I Belklinika.

(BLOOD VOLUME) (POLYCYTHEMIA VERA radiother)
- (PHOSPHORUS radioactive)

BURGER, Tibor, dr.; NAGY, Ibolya, dr.; KESZTHELYI, Bela, dr.; PEER, Janos, dr.

Blood coagulation changes in polycythemia vera I. Orv. hetil. 103
no.15:687-689 15 Ap '62.

1. Pecsí Orvostudományi Egyetem, I Belklinika.

(BLOOD COAGULATION) , (POLYCYTHEMIA VERA blood)

HUNGARY

BURGER, Tibor, Dr, BRASCH, György, Dr, KESZTHELYI, Bela, Dr; Medical University of Pecs, I. Medical Clinic (director: BARTA, Imre, Dr) (Pecsi Orvostudományi Egyetem, I. Belklinika).

"Iron Metabolism in LED and in Rheumatoid Arthritis."

Budapest, Orvosi Hetilap, Vol 107, No 42, 16 Oct 66, pages 1975-1979.

Abstract; [Authors' Hungarian summary modified] Fe⁵⁹ was used for iron balance studies in cases of LED and of rheumatoid arthritis. There is a significant increase in iron metabolism in both of these diseases. Of the 11 LED patients studied, a decreased utilization of radioactive iron was observed in 7. The utilization of radioactive iron was decreased also in 7 of the patients with rheumatoid arthritis. In-vivo measurements indicate an increased iron storage by the liver and the spleen; this iron complex probably does not produce the Berlin blue reaction. On the basis of literature data and the results of the present study, the anemia is shown to be derived from three causes: defective bone-marrow activity, decreased life span of the erythrocytes and a moderate degree of iron deficiency. 3 Hungarian, 24 Western references.

1/1

- 21 -

BURGER, Tibor, dr; KESZTHELYI, Bela, dr; PÉTER, János, dr

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000721610017-6"

Examination of the life span of erythrocytes in hematologic and neoplastic diseases. Orv. hetil. 105 no.50:2363-2367 13 D '64.

1. Pecsí Orvostudományi Egyetem, I. Belklinika (igazgató: Barta Imre dr.).

BURGER, Tibor, dr.; KESZTHELYI, Bela, dr.; PEER, Janos, dr.

Kinetic studies on iron in anemia. Orv. hetil. 105 no.33:1562-1564 16 Ag '64.

1. Pecsí Orvostudományi Egyetem, I. Belklinika.

KESZTHELYI, Istvan, dr.

Basic principles of the preparation of 3/4 and 4/5 crowns.
Fogorv. szemle 58 no.7:211-217 J1'65.

KESZTHELYI, L.

KESZTHELYI, L. Absorption measurements with Co^{60} gamma radiation.
In English. p. 275.

Vol. 5, No. 3, 1956
ACTA PHYSICA
SCIENCE
Budapest, Hungary

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

"APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000721610017-6

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000721610017-6"

19
✓ γ -Counting with a scintillation counter. Lajos Kécsi
helvi. Magyar Fiz. Folyóirat 3, 383-400 (1965).
10.4 X 10.2 X 22.1 mm. NaI crystal was used. The elec-
tronic circuit is described. Efficiency for unfiltered γ -rays
from Ra was $13.4 \pm 0.2\%$ and for Co⁶⁰ $14 \pm 0.2\%$.
B. Román

4E3C(2)
4E3D

2

Keser Thely, L.

19
 Determination of γ -rays of high energy. István Eros and
Lajos Keserthelyi (Magyar Tudományos Akad. Központi
For Kutató Intézete, Budapest, Hung.). Magyar Tud-
ományos Akad. Közlekedési Fiz. Kutató Intézete Közleményei
4, 228-31 (1958). γ -Quanta with 17.6 m.e.v. energy, arising
 from the $\text{Li}^6(p, \gamma)\text{He}^4$ reaction, were detd. with a scintillat-
 ing counter. Secondary electrons leaving the material be-
 tween the source and the crystals increase the efficiency of
 the counter. This effect means a correction of 30% for this
 counter used. L. S. Eros

JW

1/1

Distr: 4E30/4E3d

Boe

KESZTHELYI, L.

Scintillation dosimetry by a photographic method. P. 253.
MAGYAR FIZIKAI FOLYOIRAT. (Magyar Tudományos Akademia) Budapest.
Vol. 4, no. 3, 1956.

SOURCE: East European Accessions List (EEAL) Library of Congress.
Vol. 5, No. 11, November 1956.

21
5
9832
9834
GW
Y
Dose measurements with scintillation crystals and photographic plates. Lajos Keszthelyi and Lehel Zsoltos. Magyar Fiz. Folyóirat 4, 255-9 (1958).—K. and Z. combined the sensitivity of a scintillation counter with the integral effect of the photographic plate to measure radiation. An anthracene crystal was placed on an Agfa x-ray Duro film. The light produced by the γ -rays of a 0.155 mc. Ra source absorbed in the anthracene crystal darkens the photographic film. The darkening with the anthracene crystal is about 10 times that without it. The d. was measured with an Orphot photometer.

ER
FIM
KOR

KESZTHELYI, L.

Measurements in nuclear physics and training physicists. p. 68
FIZIKAI SZEMLE. (Eotvos Lorand Fizikai Tarsulat) Budapest.
Vol. 6, no. 2, Apr. 1956

Source: EEAL -IC Vol 5, No. 10 Oct. 1956

17 5

Notes on the transitions from the excited levels of platinum-192. / Lajos Keszthelyi and József Zimányi. Magyar Tudományos Akadémia Fizikai Kutató Intézetének Közleményei 3, 495-501 (1957).—The 784-e.kv. energy level of Pt^{192} decays partly by 403-e.kv. E3 radiation into the 314-e.kv. excited level and partly by 784-e.kv. E4 radiation into the ground state. It follows from the high intensity of the crossover that the 403-e.kv. transition has to slow down to about 10^{-8} sec. According to the β - γ coincidence measurements, the lifetime of the 403-e.kv. transition is $< 2 \times 10^{-8}$ sec. In these expts., an anthracene single crystal was used as β -detector connected to an RCA 6810 photomultiplier and $1\frac{1}{2} \times 1$ in. NaI crystal connected to an RCA 6342 type photomultiplier as the γ -detector. A fast, accurate method is described to measure the high-energy part of the Pt^{192} spectrum by using a scintillation spectrometer. The relative intensity of the 784-e.kv. radiation was found as $< 0.5 \times 10^{-3}$ (in terms of the intensity of the 600 e.kv. lines). From the coincidence measurements, it is concluded that the intensity of the 784-e.kv. transition is by 3 orders of magnitude lower than the value given above. The existence of the 1030- and 1216-e.kv. lines reported in the literature was also verified during the expts. J. R.

HUNGARY/Nuclear Physics - Nuclear Reactions.

C

Abs Jour : Ref Zhur Fizika, No 12, 1959, 26883

Author : Keszthelyi, Lajos; Eron, Janos

Inst : Kozpont; Fizikai Kutato, Intezet, Atomfizikai
Ositaly, Hungary

Title : (γ , p) Reactions on Na²³, K³⁹, I¹²⁷, and Cs¹³³

Orig Pub : Magyar fiz. folyoirat, 1958, 6, No 6, 553-564

Abstract : It is known that from among the reactions produced by γ rays, the most difficult to interpret are the (γ , p) reactions, In particular, the effective cross sections and also the energy spectrum of the protons for these reactions cannot be explained by using the statistical model, which gives a good account of itself in the case of (γ , n) reactions. In work with γ rays, obtained from the reaction Li⁷ (p, γ) Be⁸,

Card 1/2

- 25 -

KESZTHELYI, Lajos

Conference on Low-Energy Nuclear Physics, Tihany, September
16-21, 1963. Fiz szemle 14 no. 3:102-104 Mr '64.

1. "Fizikai Szemle" szerkeszto bizottsagi tagja.

KISZTELLAI, I.

Cross-section of the $I^{127}(\gamma, n) I^{126}$ nuclear reaction.

p. 310. (MAGYAR BIZIAR POLYCHIZAT) Vol. 5, no. 4, 1957
Budapest, Hungary

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

C-5

HUNGARY/Nuclear Physics - Nuclear Reaction

Abs Jour : Ref Zhur - Fizika, No 4, 1959, No 5203

Author : Ero Janos, Keszthelyi Lajos

Inst : -

Title : The (γ ,p) Reaction on Potassium.

Orig Pub : Magyar tud. akad. Kozp. fiz. kutato int. kozl., 1957, 5,
No 4, 428-435

Abstract : A thin crystal of KI is exposed to γ rays from Li with energies of 17.6 Mev. The energy spectrum of the protons obtained as a result of the reaction $K^{39}(\gamma, p)Ar^{38}$ was measured. The resultant spectrum deviates considerably in the high energy portion from that expected by statistical theory. V. Lend'yel

Card : 1/1

HUNGARY/Nuclear Physics - Structure and Properties of Nuclei

C-4

Abs Jour : Ref Zhur - Fizika, No 1, 1959, No 436

Author : Keszthelyi Lajos, Zimanyi (Mraz) Joszef

Inst : -

Title : Remarks on Exicted Levels of Pt¹⁹²

Orig Pub : Magyar tud. akad. Kozp. fiz. kutato int. kozl., 1957, 5,
No 5, 495-501

Abstract : The Pt¹⁹² nuclide goes from an excited state with energy 784 keV partially into the 316-keV state by emission of radiation (E2) with energy 468 keV, and partially into the ground state by emission of 784-keV radiation (E4). Starting from the greater intensity of the transition into the ground state, the authors conclude that the time of the E2 transition should be on the order of 10^{-5} seconds. On the basis of the beta-gamma coincidences, the 468-keV transition time is less than 2×10^{-8} seconds. Measurement of the high-energy-portion of the spectrum of Pt¹⁹² with the aid of a scintillation spectrometer has shown that the relative intensity of the

Card : 1/2

16

Card : 2/2

KESZTHELYI, I.; MACY, K.

Hungarian periodicals on physics.

P.88 (FIZIKAI SZEMLE) Budapest Vol. 7, No. 2/3, Apr./June 1957.

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

KESZTHELYI, L.

"Polarization of B-particles in the decay of Li^8 nuclei." p. 358

A MAGYAR TUDOMANYOS AKADEMIA KOZPONTI FIZIKAI KUTATO INTETETENEK
KOZLEMENYEL, Budapest, Hungary, Vol. 6, No. 5, Sept./Oct. 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 6, June, 1959.
Uncl.

KESZTHELYI, LAJOS

19 4
The 10.1-m.e.v. excitation level of the C^{13} nucleus.
Irina Fodor and Lajos Keszthelyi. Magyar Tudomány
Akad. Központj. Fiz. Kulcs. Intézetek Közleményei 6,
451-61(1958).—By detn. of the γ -ray resonance absorp-
tion level, the 10.1-m.e.v. excitation energy width was
measured to 7.5 ± 1.0 e.v. The reaction is $B^{10}(p,\gamma)C^{13}$.
The matrix element related to the 10.1-m.e.v. γ -emission in
Weisskopf units is $|M|^2 = 2.17 \pm 0.55$. The exptl. ar-
rangement consisted of a B target, bombarded with protons
from a Cockcroft-Walton generator. The γ -rays were detd.
with a $1/4 \times 2$ in. NaI(Tl) crystal and a RCA 8819 photo-
multiplier tube. A $1/4 \times 1$ -in. NaI(Tl) crystal was used as
monitor. A graphite or B-filled Al cylinder was used as ab-
sorber. E. Rona

Card 1/1

aht

Scanned

KESZTHELYI, L.

539.122.17

6/60 On some problems in connection with the Compton effect. L. Keszthelyi, P. Varga.
A Magyar Tudományos Akadémia Központi Fizikai Kutató Intézetének Közleményei (Proceedings of the Central Research Institute for Physics of the Hungarian Academy of Sciences).
 Vol. 6, 1958, No. 6, pp. 462-474, 6 figs.

The literature of the Compton effect has been studied for the purpose of finding out how far the law of the conservation of energy is proved in the case of primary processes, in other words the extent to which the Compton effect supports the theory on the nature of the particle of light and the extent to which it permits the possibility of wave conception. It has been found that the experimental results are in agreement with the particle theory but no definite proof is given.

KESZTHELYI, L.

"(Y,P) reaction Na^{23} , K^{39} , J^{127} , and Cs^{133} , in atomic nuclei." p. 553

MAGYAR FIZIKAI FOLYOIRAT. (Magyar Tudományos Akadémia) Budapest, Hungary,
Vol. 6, No. 6, 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 6, June 1959.
Uncl.

Keszthelyi, L.

(γ, p) reactions in sodium-23, potassium-39, iodine-127, and cesium-133. L. Keszthelyi and J. Eötvös (Central Research Inst. Physics, Budapest, Hung.). *Nuclear Phys.* 8: 650-66 (1958).—Proton spectra of $K^{39}(\gamma, p)Ar^{38}$, $Na^{23}(\gamma, p)Ne^{22}$, $I^{127}(\gamma, p)Te^{126}$, and $Cs^{133}(\gamma, p)Xe^{132}$ reactions were investigated by irradiating KI(Tl), NaI(Tl), and CsI(Tl) crystals by $Li(p, \gamma)$ γ -rays, and the corresponding cross sections detd. Electron background was reduced by placing a guard crystal in front of the target crystal. Approx. cross sections were: 15 ± 5.8 mb. for $K^{39}(\gamma, p)$; 3.8 ± 1.5 mb. for $Na^{23}(\gamma, p)$; and 1.5 ± 0.6 mb. for $I^{127}(\gamma, p)$ and $Cs^{133}(\gamma, p)$ reactions at 17.6-m.e.v. γ -energy. The proton spectrum of the $K^{39}(\gamma, p)$ reaction showed peaks at 6.1, 9.2, and 11 m.e.v., corresponding to the 5, 2.15, and 0 m.e.v. levels of Ar^{38} . The $I^{127}(\gamma, p)$ and $Cs^{133}(\gamma, p)$ spectra were inconsistent with statistical theory, owing to the effect of direct interaction.

Norman E. Pickering

Distr: 4E3d/4E3c

Distr: AEC/E3d

Polarization of β -particles in lithium-8 decay. L. Kesz-
thelyi and J. Zimányi (Central Research Inst. Phys., Buda-
pest, Hung.). *Nuovo cimento* 10, 609-10 (1968) (in Eng-
lish). The polarization has been examd. by measuring the
circular polarization of the external bremsstrahlung produced
by the 12-m.e.v. β -particle of Li^8 in a Pb absorber. The av.
polarization of the left-handed circularly polarized γ -rays
 $P_\gamma = (86 \pm 20) \%$. It is concluded that the β -particles of
 Li^8 are polarized in a backward sense. W. W. Sabo

~~KESTKHELI, L.~~
KESZTHELYI, L.

¹⁹ ¹⁹
Excited levels of Pt^{119} L. Keszthelyi and L. Zimán
(Central Research Inst. Phys., Budapest). *Acta Phys.*
Acad. Sci. Hung. 10, 1-6 (1959) (in English).—Coincidence
measurements of the 408-e.kv. transition and scintillation
spectrometer measurements of the high-energy part of the
 Pt^{119} spectrum led to a verification of the existence of the
1050- and 1210-e.kv. lines and makes the existence of the
784-e.kv. line doubtful. If the latter could exist, it could
only be conceived as the acceleration of the $E4$ transition,
which has not yet been identified. Arthur Fleischner

5

2EW

anR

19 11 25
The 16.1-m.e.v. excitation level of carbon-12. L. Kesz-
thelyi and L. Fodor (Central Research Inst. Phys., Buda-
pest, Hung.). *Nuclear Phys.* 10, 564-70 (1959).—The
radiation width for the transition to the ground state
of the above level was detd. by measuring the resonant
absorption of γ -rays. The level width was found to be 7.5
 ± 1.0 e.v. The square of the matrix element for $E2$ transi-
tion, expressed in Weisskopf units, is 2.17 ± 0.55 .

Norman E. Pickering

11
Distr: 4E3c/4E3d

BR

BERKES, Istvan; DEMETER, Istvan; FODOR, Ilona; KESZTHELYI, Lajos

Voltage calibration of the K-800 cascade generator. Koz fiz kozl MTA
8 no.2/3:167-171 '60. (EEAI 10:4)

1. A Magyar Tudományos Akadémia Kozponti Fizikai Kutato Intszeto,
Magfizikai Laboratorium I.
(Cascades)

BERKES, Istvan; DEMETER, Istvan; DEZSI, Istvan; L. FODOR, Ilona; KESZTHELYI, Lajos

Investigations in the field of the background reduction of scintillation counters. Koz fiz kozl MTA 9 no.3:165-169 '61.

1. Magfizikai Laboratorium I.

21.6000

26752
G/016/61/009/004/001/001
B120/B108

AUTHORS: Keszthelyi, L., Berkes, I., Demeter, I., and Fodor, I.
(Budapest)

TITLE: Absolute measurement of the number of γ -quanta

PERIODICAL: Experimentelle Technik der Physik, v. 9, no. 4, 1961,
197 - 203

TEXT: The authors applied the γ - γ coincidence method to scintillation counters with electronic rate meter in order to determine their absolute efficiency for 4.43 and 11.67 Mev γ -radiation produced in a $B^{11}(p,\gamma)C^{12}$ reaction. If the absolute efficiency of the detector is known, it is possible to determine the absolute number of γ -quanta emitted per unit time from the number recorded by the detector. This is important for the determination of various capture cross sections and for the evaluation of the cross section of photonuclear reactions. For the measurement, a 1 cm thick B target was placed between two scintillation counters with NaI(Tl) crystal (3 by 3" and 1.5 by 1.5", respectively).

Card 1/5

Absolute measurement of the ...

26752
G/016/61/009/004/001/001
B120/BTOB

The front side of the one counter was 6 cm, that of the other 4.5 to 24 cm distant from the center of the target. The target was bombarded by 170-kev protons perpendicular to the connecting line of the two counters. Fig. 1 shows the block diagram of the electronic measuring arrangement. The discriminator I was used as an integrating stage. Pulses with amplitudes exceeding 7 Mev were detected in the measurement of the 12-Mev group. The discriminator II was adjusted to the maximum of the amplitude distribution of 4.43 Mev. The delay circuit was empirically adjusted to the maximum coincidence number. The signals from the individual counters were led to a 100-channel analyzer (A I 100-1) with ferrite storage system. At first, two measurements were made in which the counter with the large crystal was 4.5 and 24 cm from the target. The results had to be corrected, since about $\pm 10\%$ of the 11.7-Mev radiation was also covered in counter II, and some 3% of the 16.1-Mev radiation in counter I. Random coincidences had to be considered, too. The corrected results read as follows (n in pulses/sec, K = coincidence). 4.5 cm distance : $n_I = 2550 \pm 8$, $n_{II} = 338 \pm 18$, $n_K = 7.37 \pm 0.15$. 24 cm distance : $n_I = 244 \pm 11$,

Card 2/5

Absolute measurement of the ...

²⁶⁷⁵²
G/016/61/009/004/001/001
B120/B108

$n_{II} = 305 \pm 16$, $n_K = 0.67 \pm 0.027$. According to the anisotropy of the angular correlation of the observed γ -radiation of the 4-Mev and the 12-Mev group, respectively, one finds: $n_I = \omega_I \eta_{I,12} n_o w(\theta_1)$; $n_{II} = \omega_{II} \eta_{II,4} n_o w(\theta_2)$; $n_K = \omega_I \omega_{II} \eta_{I,12} \eta_{II,4} w(\theta_1, \theta_2, \phi)$. (ω = solid angle of the counter, referred to the radiation source and divided by 4π ; η = efficiency; n_o = number of cascade processes/sec; θ_1, θ_2 = polar angles of the two radiations (both 90°); ϕ = angle formed in the horizontal plane by these radiations (180°); $w(\theta_1)$, $w(\theta_2)$, and $w(90^\circ, 90^\circ, \phi)$ were taken from publications. The authors obtained the following results. Distance 4.5 cm: $\omega_I \eta_{I,12} = (1.98 \pm 0.11) \cdot 10^{-2}$, $\omega_{II} \eta_{II,4} = (2.71 \pm 0.13) \cdot 10^{-3}$. Distance 24 cm: $\omega_I \eta_{I,12} = (1.98 \pm 0.12) \cdot 10^{-3}$, $\omega_{II} \eta_{II,4} = (2.55 \pm 0.13) \cdot 10^{-3}$. The following also holds: $\omega \eta = \frac{1}{2} \int_0^2 (1 - e^{-\mu x(\alpha)}) \sin \alpha d\alpha$. μ denotes the

Card 3/5

Absolute measurement of the ...

26752
G/016/61/009/004/001/001
B120/B108

absorption coefficient of the NaI crystal for a radiation of given energy,
 $\alpha_2 = \arctan \frac{r}{t}$, r = radius of the NaI crystal, t = distance between its
 front plate and the radiation source, $K(\alpha) = t \sec \alpha$ for $0 \leq \alpha \leq \alpha_1 = \arctan \frac{r}{h+t}$,
 $K(\alpha) = r \operatorname{cosec} \alpha - h \sec \alpha$ for $\alpha_1 < \alpha < \alpha_2$, h = height of the
 NaI crystal. Fig. 4 shows the curve for 11.7-Mev γ -quanta, obtained by
 graphical integration of this equation, which agrees within $\pm 10\%$ with the
 values obtained at various distances of the counter with the large crystal
 from the radiation source. There are 4 figures, 2 tables, and 9 refer-
 ences: 1 Soviet-bloc and 8 non-Soviet-bloc. The four most recent refer-
 ences to English-language publications read as follows: Ref.2: T. Naka-
 mura, K. Futumaga, K. Takamatsu and S. Yasumi, Mem. Coll. Sci. Kyoto Univ.
 29, 141 (1959); Ref.4: J. L. Putman, Measurement of Disintegration Rate, in
 K. Siegbahn, Beta and Gamma Ray Spectroscopy, North-Holland Publishing
 Company, Amsterdam, 1955, 832 pages; Ref.5: F. Ajzenberg-Selove and T.
 Lauritsen, Nucl. Phys. 11, 1(1959); Ref.9: P. J. Grant, F. C. Flack, J. G.
 Rutherglen and W. M. Deuchars, Proc. Phys. Soc. A 67, 751(1954).

Card 4/5

Absolute measurement of the...

26752
G/016/61/009/004/001/001
B120/B108

ASSOCIATION: Zentralforschungsinstitut für Physik, Budapest (Central
Research Institute of Physics, Budapest)

SUBMITTED: January 24, 1961

Legend to Fig.1: (1) amplifier; (2) discriminator; (3) coincidence; (4) de-
lay circuit; (5) counter; (6) multichannel analyzer; (7) amplifier; (8) de-
lay line.

Card 5/5

KESZTHELYI, Lajos (Budapest)

The Mossbauer effect and its applications. Magyar fizikai folyoir 9 no.4:
289-326 '61.

1. Kozponti Fizikai Kutato Intezet.

BERKES, Istvan; KESZTHELYI, Lajos

Measuring the durability of atomic nuclei. Fiz szemle 10 no.9:
262-268 1961.

1. Kozponti Fizikai Kutato Intezet, Budapest 2. "Fizikai Szemle"
szerkeszto bizottsagi tagja (for Keszthelvi).

KESZTHELYI, Lajos

Experimental demonstration of the free neutrino. Fiz szemle 11 no.2:
47-50 F '61.

1. Kozponti Fizikai Kutato Intezet.

DEMETER, Istvan; DEZSI, Istvan; KESZTHELYI, Lajos

Measurements by means of the Mossbauer-effect. Koz fiz kozl MTA
1962.1:21-30. '62.

KESZTHELYI, Lajos

"Scientific foundations of vacuum technique" by S. Dushman. Reviewed by Lajos Keszthelyi. Fiz szemle 10 no.2:63-64 F '60.

1. "Fizikai Szemle" szerkeszto bizottsagi tagja.

BERKES, Istvan; KESZTHELYI, Lajos

Measuring the durability of atomic nuclei. Fiz szemle 10 no.9:262-268 S '60.

1. Kozponti Fizikai Kutato Intezet, Budapest. 2. "Fizikai Szemle" szerkeszto bizottsagi tagja (for Keszthelyi).

KESZTHELYI, Lajos

✓ -transitions in the Z=N-type even-even atomic nuclei. Magyar fizikai folyóirat 11 no.1:21-68 '68.

1. Kozponti Fizikai Kutató Intézet.

KESZTEHLI, Lajos

Progress in physical sciences. Fiz szemle 7 no.1:55-36 F '57.

1. "Fizikai Szemle" szerkeszto bizottsagi tagja.

KESZTHELYI, Lajos

"Measurement of nuclear radiation" by Ervin Fenyves. Reviewed
by Lajos Keszthelyi. Fiz szemle 7 no.6:204 D '57.

1. "Fizikai Szemle" szerkeszto bizottsagi tagja.

KESZTHELYI, Lajos; NAGY, Karoly

Remarks about "Magyar Fizikai Folyoirat." Fiz szemle 7 no.2/3:
88-89 Ap-Je '57.

1. "Fizikai Szemle" szerkeszto bizottsagi tagja (for Keszthelyi).

KESZTHELYI, Lajos; ZIMANYI, J. (Budapest)

An account of the 2d Matrahaza Conference on Nuclear Physics.
Fiz szemle 8 no.2:64-66 F*58

1. "Fizikai Szemle" szerkeszto bizottsagi tagja (for Keszthelyi).

DEZSI, Istvan; KESZTHELYI, Lajos; CSER, Laszlo; KLAMM, Katalin.

57 57

Co -Fe sources for measuring the Mossbauer effect. Koz fiz kozl
MTA 12 no.1:110-118 '64.

CSEK, Laszlo; DEZSI, Istvan; KESZTHELYI, Lajos; PAL, Lenard

Study on the antiferromagnetic-ferromagnetic transformation of Fe-Rh alloys by means of the Mossbauer effect. Koz fiz kozl MTA 12 no.2:119-124 '64.

1. Corresponding member, Hungarian Academy of Sciences (for Pal).

ALMASI, Lajos; SANDOR, Laszlo; KESZTHELYI, Lajos, tudományos munkatárs;
BERKES, István, tudományos munkatárs; FODOR, Ilona, tudományos
munkatárs. Koz fiz kozl MTA 12 no.4:299-312 '64.

1. Central Research Institute of Physics, Hungarian Academy
of Sciences, Budapest.

KESZTHELYI, Lajos

Study trip to Northern Europe. Fiz szemle 15 no.3:96-97 Mr '65.

1. Editorial Board Member, "Fizikai Szemle."

KESZTHELYI, Mihaly, dr.; DEMENY, Peter, dr.; FILIPP, Geza, dr.

Experimental studies with the anti-asthmatic drug AM-49.
Orv. hetil. 98 no.7-8:161-163 24 Feb 57.

1. A Debreceni Orvostudományi Egyetem I. sz. Belklinikájának
(Igazgató: Fornet, Bela, dr. egyet. tanár) közleménye.

(ALLERGY, exper.

eff. of arsenic acid - gold salt - potassium iodide
prep. in guinea pigs (Hun))

(ARSENICALS, eff.

arsenic acid - gold salt - potassium iodide prep. on
exper. allergy (Hun))

(GOLD, eff.

gold salt - arsenic acid - potassium iodide prep. on
exper. allergy (Hun))

(IODIDES, eff.

potassium iodide - arsenic acid - gold salt prep. on
exper. asthma (Hun))

Keszthelyi, M.
FILIPP, Giza; KESZTHELYI, Mihaly

Allergic aspects of the diseases of the hemopoietic system.
Orv. hetil. 98 no.29:783-787 21 July 57.

1. A Debreceni Orvostudományi Egyetem I. sz. Belklinikájának
(igazgató: Fonet, Bela, dr. egyet. tanár) közleménye.
(BONE MARROW, dis.
allergic, classif. (Hun))
(ALLERGY, manifest.
bone marrow dis., classif. (Hun))

KESZTHELYI, Mihaly, Dr.; VARALLYAI, Istvan, Dr.; DEMENY, Peter, Dr.

Mass incidence of acute nephritis in small community. Orv. hetil.
99 no.51:1792-1793 21 Dec 58.

1. A Debreceni Orvostudományi Egyetem I. sz. Belklinikájának (igazgató:
Fornet Bela dr. egyet. tanár) és Kózegegysegügyi Intézetének (igazgató:
Jeney Endre dr. egyet. tanár) közleménye.
(NEPHRITIS, etiol. & pathogen.
streptoc., outbreak in small Hungarian community (Hun))
(STREPTOCOCCAL INFECTIONS, epidemiol.
nephritis outbreak in small Hungarian community (Hun))

HANKISS, Janos, dr.; KESZTHELYI, Mihaly, dr.

Therapy of ulcerous colitis with locally administered rheopyrine.
Orv.hetil. 100 no.52:1884-1885 D '59.

1. A Debreceni Orvosegyetem I. sz. Belklinikájának (igazgató:
Fornet Bela dr. egyetemi tanár) közleménye.
(COLITIS, ULCERATIVE ther.)
(AMINOPYRINE ther.)
(PHENYLBUTAZONE ther.)

HANKISS, Janos; DEMENY, Peter; KESZTHELYI, Mihaly

Experimental data on the mechanism of ADH distribution in the tissue. Kiserletes Orvostud. 13 no.1:11-18 Mr '61.

1. Debreceni Orvostudományi Egyetem, I. sz. Belgyógyászati
Klinikája.
(VASOPRESSIN metab)

HANKISS, J.; DEMENY, P.; KESZTHELYI, M.

The mechanism of ADH-inactivation in tissues. Acta med. Acad. Sci.
Hung. 18 no.1:17-25 '62.

1. First Department of Medicine, University School of Medicine, Debrecen
(Director: Professor B. Fornet)

(VASOPRESSIN metab)

L 9758-66

ACC NR: AP6001949

SOURCE CODE: HU/0018/65/017/001/0028/0031

AUTHOR: Hankiss, Janos--Khankish, Y.; Kesztnelyi, Mihaly--Kestkhei, M.;
Demeny, Peter--Demen', P

ORG: I. Medical Clinic, Medical University of Debrecen (Debreceni Orvostudományi Egyetem I. sz. Belklinika)

TITLE: Adrenocortical hormones and ADH decomposition

SOURCE: Kisebtes Orvostudomány, v. 17, no. 1, 1965, 28-31

TOPIC TAGS: hormone, endocrinology, biochemistry

ABSTRACT: It has been determined that the ADH decomposition in the liver and renal tissue of either normal or adrenalectomized animals is not influenced by adrenocortical hormones. Even higher doses of hydrocortisone and DOCA have not increased the ADH decomposition. It has been concluded that the influence of corticoids on the water balance is not exerted through the decomposition of ADH. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: 29Feb64 / ORIG REF: 004 / OTH REF: 031

Card 1/1

BOKOR, Laszlo, Dr. KESZTHELYI, Mihaly, Dr; Medical University of Debrecen, Radiological Clinic (director: JONA, Gabor, Dr. docent) and I. Medical Clinic (Röntgenklinik és I. sz. Belklinika).
APPROVED FOR RELEASE: 09/17/2001
CIA-RDP86-00513R000721610017-6

"Pulmonary Aspergilloma."

Budapest, Magyar Radiologia, Vol XVIII, No 2, Apr 66, pages 72-75.

Abstract: [Authors' English summary modified] Aspergilloma is the only form of mucotic pulmonary disease which can be recognized by X-ray examination. The clinical picture of the disease is discussed. The case is the first one described in the Hungarian medical literature. 4 Eastern European, 10 Western references.

1/1

KESZTHELYI, S.; KUTVANI, E.

Individual analysis of the hydrocarbons of benzene from Turmazy. p. 289.

MAGYAR KEMIAI FOLYOIRAT. (Magyar Kémikusok Egyesülete) Budapest, Hungary
Vol. 65, no. 10, Oct. 1959

Monthly List of East European Accession (MEAI), Vol. 9, no. 2, Feb. 1960

Uncl.

VAMOS, Endre, dr. (Budapest VIII, Szentikirályi u.29); ZAKAR, Pal
(Budapest V, Kecskemeti u.15); MOZES, Gyula, dr.(Veszprem,
Kiss Eajos lakotelep 8); KESZTHELYI, Sandor (Veszprem, Jozsef
Attila u.3)

Preparation of lubricating oils from Romashkino cude oil. Acta
chimica Hung 31 no.1/3:267-280 '62.

1. Ungarisches Erdol- und Erdgas Forschungsinstitut, Veszprem.

KESZTHELYI, S.
~~KERENI, E.~~; ~~KESTKHEL'I, Sh.~~

Individual analysis of gasoline hydrocarbons by means of a highly effective rectification and gas-liquid chromatography. Khim.i tekhn.topl.i masel 5 no.6:53-60 Je '60.

(MIRA 13:7)

1. Vengerskiy nauchno-issledovatel'skiy institut nefti i prirodnogo gaza.

(Gasoline--Analysis) (Hydrocarbons)

BELEDI, Dezsó, okleveles gépészmérnök; KESZTHELYI, Tibor, okleveles
gépészmérnök

Development of winged boats in Hungary. Jarmu mazo gep ll no.9:
346-351 S '64.

1. Designing Division, Vac Factory Unit, Hungarian Shipyard and
Crane Factory, Vac.

GROMA, Geza; KESZTHELYI LÁNDORI, Sára

Measurement tasks in the laboratory of third year students in physics.Pt.2. Fiz.szemle 8 no.4:128-130 Ap '58.

1. Eotvos Lorand Tudományegyetem II.Kísérleti Fizikai Intézete.

BC

Effect of sympathetic and chorda stimulation on the composition of the submaxillary saliva. H. KAGNYO and J. MARTIN (Magyar Orr. Arch., 1933, 30, 416-437). Stimulation of the sympathetic and parasympathetic nerves in dogs decreases the K, Na, Cl, and org. content of saliva in proportion to the amount secreted. The Cl concn. is decreased by stimulation of the sympathetic but not of the chorda tympani. The total concn. of K, Ca, and org. matter after sympathetic stimulation is higher and the Na and Cl concn. lower than after stimulation of the chorda tympani. This higher concn. is accompanied by higher mucin and albumin contents. Previous sympathetic stimulation does not affect the inorg. but increases the org. content, and decreases the rate of secretion of saliva after chorda tympani stimulation. A. W. M.

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

11F

PROCESSES AND PROPERTIES INDEX

Physicochemical constants of the submaxillary saliva obtained by chorda and sympathetic stimulation. Calcium of the submaxillary saliva obtained by chorda stimulation. Lóránd Kesátyus and János Martin. *Magyar Orvosi Arch.* 40: 385-86 (1939); cf. C. A. 33, 4654. —The sp. gr. of the saliva obtained by chorda stimulation (I) from the submaxillary gland is 1.029-1.041. The higher pH of I (7.80-7.87) compared with that of saliva obtained by sympathetic stimulation (II) (7.08-7.37) is caused partly by the higher concn. of alk. constituents and partly by the smaller buffer capacity. The pH of I obtained after previous sympathetic stimulation is somewhat nearer to the pH of II; this shows that during the sympathetic stimulus certain chem. changes occur in the gland. The alk. of II is lower, its acidity higher, than that of I. According to their concn. in electrolytes, the f. p. of I is -0.38 to -0.48, that of II -0.175 to -0.50. The surface tension of II is somewhat higher than that of I; the difference is caused by the unequal dispersity of the mucin and by the unequal pH. II is less viscous than I; this is caused by the less alk. reaction of II.

C. I. B.

ALMA MATER METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND CODES										3RD AND 4TH CODES									
PROCESSING AND PROPERTIES INDEX																			
BC 2.4 Origin and mode of secretion of the calcium of the submaxillary saliva obtained by chorda stimulation. L. Kauriyu and J. Martin (Mayer Ova. Arch., 1930, 68, 364-365).—[Ca] of the saliva is equal to that of the blood plasma and intermediate between those of arterial and venous blood. It does not differ with increased saliva secretion. It is not affected by the intensity of stimulation of the chorda tympani, but follows changes in the [Ca] in the blood. Unlike other constituents of the submaxillary saliva, Ca is a product of filtration and not of active glandular function. A. W. M.																			
ASR-5LA DETAILING LITERATURE CLASSIFICATION																			
SOURCE SYMBOL										SOURCE NUMBER									
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20										21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40									

11B

PROCESSING AND PROPERTY INDEX

A new method for the determination of mucin in saliva.
 Logan Kennedy and Katalin Pribauer. *Magyar Orvosi
 Arch.* 40, 383 (1939).--Mucin is removed from saliva with
 20% HCl. The N content of whole and mucin-free
 saliva is then detd. E. Block

AYO 344 METALLURGICAL LITERATURE CLASSIFICATION

10

RESEARCH ON THE CHEMICAL STRUCTURE OF COMPLEX PROTEINS
WITH THE AID OF IMMUNITY REACTIONS. L. K. Kestys.
Dobrocenti Tisza Istvan Tudomanyos Irodasig II. Orszag-
yosok Munkai 1942, 1-32; Chem. Zentr. 1943, 1, 840.-
The antigen specificity of phosphoprotein, for instance,
casein, is detd. through the H_2PO_4 group. Its splitting
off is an irreversible reaction. In the rephosphorylation
of P-free casein, the P enters another place in the mol.,
different from that in native casein. The dephosphoryla-
tion of rephosphorylated casein is reversible. Native casein
is a mixt. of different fractions. The casein is not anti-
genically active, it is questionable if it is obtained as
native casein. The globulin component of different
animal hemoglobins is species specific and, therefore,
structurally different. The globins are especially stable
proteins which can be distinguished from albumins and
histones. Myoglobin and hemoglobin are not identical
but can be sepd. from each other structurally. Parenteral
addn. of the yellow enzyme from yeast and its protein
carriers does not produce antibodies. B. Prescott

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

RESEARCH ON THE CHEMICAL STRUCTURE OF COMPLEX PROTEINS

PROCESSING AND PREPARATION INDEX																										
1ST AND 2ND CROUS													1ST AND 2ND CROUS													
Synthetic hormone antigens. <i>Leland Krastys, De- brenci Tisz István Tudományos Társaság II. Összül- désük Munkái 1942, 33-50; Chem. Zentr. 1943, I, 850.</i> By nitration of pyrocatechol, reduction of nitropyrocatechol to aminopyrocatechol and adding on synthetic adrenaline according to Stolz aminoadrenaline is obtained. This can be diazotized and coupled with horse or bovine serum. This protein compd. of adrenaline behaves in immunity re- actions as a specific antigen. The specificity of the anti- bodies are destroyed through the adrenaline groups. There are produced adrenaline immune sera. The treatment with adrenaline azoprotein does not influence the adrenaline sensitiveness of different animals and their organs. The sera are also unable to inactivate adrenaline <i>in vitro</i>. The adrenaline azoprotein antibodies display their own physiol. action, which is noticeable in the metabolism of adrenaline, but not on smooth muscle. On frog heart, uterus, blood pressure and the nictitating membrane of the cat, there is proof that the introduction of an NH₂ or NO₂ group in the benzene ring of adrenaline does not influence its physiol. activity. The methylamine group in the side chain is necessary for activity. Through the introduction of the NH₂ group, the importance of the sec. OH group in the side chain is diminished. Benjamin Prescott.																										
ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION BOOKS 1-10000 SERIALS 10001-100000 BOOKS 1-10000 SERIALS 10001-100000																										

ca

Further investigations on the physiological action of adrenalyasoprotein antibodies. László Wéss, László Krátsy, and Tibor Szilágyi (Univ. Debrecen, Ungarn). *Ungar. med. Arch.* 44, 273-80 (1943); *Chem. Zentr.* 1944, II, 324-5.—The adrenalyasoprotein compds., like the protein compds. of other biol. and pharmacol. principles, behave as chemospecific antigens. The antibodies produced by the administration of adrenalyasoproteins, however, were not able to inhibit the action of adrenaline on the blood pressure and the nictitating membrane of rats, on the vaginal cat uterus, on Trendelenburg frogs, and on hypodynamic frog hearts. Recent expts. have shown that the administration of amts. of adrenaline at the upper limit of the physiol. dose decreased the respiratory metabolism of white rats. This primary effect of adrenaline was not observed in rats immunized with adrenalyasoprotein substance. Instead, such animals showed a considerable increase in the respiratory metabolism. The explanation of these phenomena is to be sought in the fact that the physiol. action of the hormone antibody is evidenced in the first place in the hormonal regulation of the processes of cell metabolism and only to a much slighter degree in a mech. process so rapidly established and likewise so quickly disappearing as the contraction of the smooth muscles produced by adrenaline.

M. G. Moore

1ST AND 2ND ORDERS		PROCESSES AND PROPERTIES INDEX		3RD AND 4TH ORDERS	
116		116		116	
Antigenic properties of casein. 1. Kozlowsky and D. Bagdy (Univ. Debrecen). 2. <i>Immunobiol.</i> 105, 263-71 (1945). Dephosphorylated casein can be rephosphorylated by treatment with POCl_3. The phosphoric acid group of the rephosphorylated casein can again be removed, and the product is serologically identical with dephosphorylated casein produced from native casein. Phosphorylation of dephosphorylated casein is, accordingly, a reversible process. Casein is apparently not an entity but a mixt. of fractions with different chem. and phys. characteristics. Treatment of casein with NH_4Cl at different H-ion concns. yields 4 fractions, α, β, γ, and δ (Cherbuluz, E., and Schmiedt, M. L., <i>C. I.</i> 26, 1074). Immune serums for native casein react with α, β, and γ, but not with δ. Antibodies for α react with α and β, with native casein, and with γ in high concn., but not with δ. Antibodies for γ react only with γ (also with native casein in high concn.). Fraction δ cannot elicit antibodies. Fractions α and β are serologically indistinguishable and therefore must be considered identical. The antigenic properties of native casein are dictd. by its fractions α and β. Fraction γ has divergent antigenic characteristics and plays no role in detg. the antigenic properties of whole casein. Fraction δ has no antigenic properties. It is questionable whether it is preformed in native casein or is a denatured artificial product formed during fractionation. Julian H. Lewis					
ASB-51A METALLURGICAL LITERATURE CLASSIFICATION					
116					

116

Synthetic preparation of histamine antigen (histamine azobenzeneazoprotein). István Went and László Kesztyűs (Univ. Debrecen, Hungary). *Chemical Abstracts* 2, 257 07 (1946). (1) Aniline (18.6 g.) in 60 cc. HCl (d. 1.18) and 150 cc. water was diazotized with 14.4 g. NaNO₂, and added in small portions, with cooling, to 36 g. histamine dihydrochloride in 1000 cc. water plus 40 g. Na₂CO₃. After 24 hrs. the ppt. was sepd. and washed with cold water, then extd. with 120, 100, and 100 cc. 2.5% HCl. The soln. was dild., and made alk., and 12 g. of cryst. benzeneazohistamine, m. 237°, was ob-

tained. (2) p-Nitroaniline (13.8 g.) in 35 cc. concd. HCl and 75 cc. water was poured into 400 cc. ice water, and 7.2 g. NaNO₂ in 40 cc. water was added. The soln. was dropped cautiously into 18 g. histamine dihydrochloride made alk. with 20 g. Na₂CO₃. After 24 hrs. the ppt. was filtered out, washed, and extd. with 100, 50, and 50 cc. of 2.5% HCl, the exts. made up to 1000 cc., and made alk. with Na₂CO₃. Crystals of p-nitrobenzeneazohistamine, m. 231°, were obtained in 33% yield. p-Aminobenzeneazohistamine could not be prepd. by reducing this compd. (3) p-Aminocetanilide (.80 g.) in 50 cc. HCl (d. 1.18) and 150 cc. water was diazotized with 14.4 g. NaNO₂ in 80 cc. water and added to 36 g. histamine dihydrochloride in 1000 cc. water plus 40 g. Na₂CO₃. After 24 hrs. the ppt. was filtered out, washed with cold water, and extd. with 120, 100, and 100 cc. of 2.5% HCl. The ext. was dild. with water and made alk. to give the amorphous red powder p-aminobenzeneazohistamine in 30% yield, m. 241-3°. This compd. can easily be diazotized and bound to proteins of horse or cattle serum. Histamineazoproteins behave like chemospecific antigens. In rats and guinea pigs an antihistamine substance was formed.

István Földi

ASH-35A METALLURGICAL LITERATURE CLASSIFICATION

ca

PREVIOUS AND CURRENT DATA

Influence of ferrous iron on the effects of adrenaline
L. Kesztyus, T. Szilágyi, and E. Varga (Univ. Debrecen,
Hungary). Z. Vitamin-, Hormon- u. Fermentforsch. 1,
228-40(1947); cf. Ivanović and Stern, C.A. 37, 5498^a. —
 Fe^{++} markedly suppressed the action of adrenaline (10
parts of Fe to 1 of hormone) and of ephedrine (20:1) on
isolated hypodynamic frog heart. The vasodilatory
effect of adrenaline on Trendelenburg frogs was abolished
by Fe^{++} ; this antagonism did not involve the parasym-
pathetic nervous system, since atropinization had no in-
fluence. Fe^{++} had a transitory but marked inhibitory
effect on the increase of blood pressure and of contractions
of the spleen due to adrenaline administered in dogs; it
also abolished the blood-pressure-reducing effect of ad-
renaline following ergotamine and yohimbine adminis-
tration. The hyperglycemic effect of adrenaline was, how-
ever, not affected by Fe^{++} . The blood-pressure-reducing
effect of histamine was counteracted by Fe^{++} . It was
concluded that Fe^{++} acted on smooth muscle to inhibit
strongly the irritability of the musculature of the blood
vessels by vasodilators and vasoconstrictors.

Erich Hirschberg

116

Production and immunological properties of novocaine-azoprotein. István Went and László Koczka. *Acta Veter. (Bratislava)* 1, 85 (1959). Novocaine-HCl is diazotized and coupled with cattle or horse serum. The products are pptd. with HCl after 10 min., filtered out, washed, agitated with water, dissolved in some NaOH soln., twice pptd. with HCl, dissolved in some NaOH alkali, pptd. with HCl, again, dissolved in phenolphthalein, filtered, and made up to 200 ml. The product contains 3% azoprotein. Rabbit immune serums prepared with novocaine-cattle serum-azoprotein showed identical reactions both with novocaine-cattle-azoproteins and with novocaine-horse-azoproteins but did not react with the proteins of natural cattle serum nor with those of natural horse serum. They behaved as chemospecific antigens their specificity being detd. by the novocaine group. In pptn.-prevention tests novocaine, novocaine-azoprotein antibodies and antigen, between novocaine, aniline, $p\text{-H}_2\text{NC}_6\text{H}_4\text{CO}_2\text{H}$, $p\text{-H}_2\text{NC}_6\text{H}_4\text{SO}_3\text{NH}_2$, and novocaine had no effect on the reaction. The latter exp. showed also the possible dependence of group specificity on the NH_2 of the benzene ring in the p -position to an esterified carboxyl group. 15 references. I. F.

KESZTYUS, L. 1949

(A Debreceni Tud Korelettani Intezetnek Kozlomenye)

"Chemistry of Histamines and Histamine-Azoproteins."

Orvosi Hetilap 1949, 90/20(617-619)

Abst: Exc. Med. 11, Vol. 111, No. 5, p. 682

HESZTYUS, L. 1949

(Physiologisches und Allgemeines Pathologisches Inst. U. of Debrecen)

"Cortin-Like" Action, of Ouabain. I"

Naunyn-Schmiedeberg's Arch. fur Experimentelle Path. und. Pharmacol. Berlin, 1949, 207/
1-2(29-38)

Abst: Exc. Med. 11, Vol. 111, No. 6, p. 803

KESZTYUS, L. 1949

(Physiol. und Allgemeines Path. Inst. II. of Debrecen)

"'Cortin-Like' Action of Ouabain.11".

Naunyn-Schmiedeberg's Arch. fur Experimentelle Pathol. und Pharmacol., Berlin, 1949
207/1-2(213-216)

Abst: Exc. Med. 11, Vol. 111, No. 6, p. 803

Antigenic properties of pollen proteins. Lóránd Kezty-
yus (Univ. Debrecen, Hung.). *Kisk. kérés Orvostudományi*
258 63 (1930). Pollen (8 g.) was taken from 3 cultivated
varieties of apple (*Malus pumila*) and from plum (*Prunus*
domestica). Pollen was ground with sand, fats and etheral
oils were removed by treating 3 times with 50 ml. EtOH.
Et₂O, the material was dried under vacuum at 40°, digested
for 24 hrs. at room temp. with 150 ml. physiol. NaCl, and
filtered. Such exts. contained 0.6-0.8% protein. For
preservation 0.25% phenol was added. Intravenous injection
of the exts. into rabbits produced precipitins. The
immune serums showed titers ranging from 1:600 to 1:3200.
No serological differences could be observed between pollen
proteins of various cultivated varieties. Immune serums
for apple protein did not react with pollen proteins of *Pyrus*
malus, nor with those of plum. The immune serum of
plum gave pos. reactions with pollen exts. of cultivated varieties
of *Prunus*, but did not react with pollen proteins of *P.*
armeniaca, *P. amygdalus*, or *P. persica*. The immune
serums for plum and *Pyrus malus* gave pos. reactions with the
veal exts. of the homologous plant variety. In both latter
cases the reaction titers were low. István Fiala

CA

117

The changes in the precipitation zone of casein in the presence of various drugs, chiefly chemotherapeutics. Sándor Surányi and László Kéry (Lévi, Debrecen, Hung.). *Kísérlet Orvostudomány* 2, 314-9 (1950).—Deriva. of salicylic acid, org. As compds., and the newer chemotherapeutics and antibiotics, such as sulfonamides, penicillin and streptomycin, showed no significant effects on the isoelec. point of casein, proving that their bacteriostatic action is independent of their colloid-chem. behavior. This colloid-chem. inactivity may partly explain the relatively low toxicity of these antibiotics and sulfonamides. Among the basic monoazo dyes phenylazodiaminopyridine (Vestlin) shifted the max. flocculation point of casein to higher pH values in a 0.001 M concn., but more dil. solns. were without effect. *p*-Ethoxy-2,4-diaminobenzene-HCl (Cystural) showed similar effects even at a concn. of 0.0002 M. Phenolphthalein and rubrophen (trimethoxydihydroxy-tritane) did not influence the isoelec. point of casein. Among the acridine dyes trypanflavine (3,6-diamino-10-methylacridine HCl salt), rivanol (2-ethoxy-6,9-diamino-acridine lactate), atebrian, and Acridine Orange (3,6-dimethyl-1,2,7-triamino-9-phenylacridine) shifted the pptn.

zone to the basic region. It is interesting to note that the limiting concns. for pptn. with trypanflavine and rivanol are the same as the concns. which must be reached when using these drugs therapeutically, namely 0.0001 and 0.0002 M. Chrysarobin (methylhydroxyanthranol) showed no effects in concns. of 0.0001 and 0.0002 M, resp. Yatrene (iodohydroxyquinolinesulfonic acid) at concns. of 0.001 and 0.0001 M shifted the pptn. zone to the acid region. Novatophan (Me 2-phenylquinoline-4-carboxylate) was ineffective. Quinine-HCl and optoquine (ethylhydrocupreine) in concns. of 0.001 M shifted the pptn. zone to the basic region but were ineffective in higher dilns. Eucupine (isoamylhydrocupreine) showed similar effects even at a concn. of 0.0001 M. Neosalvarsan shifted pptn. zone to the acid region even in a concn. of 0.0002 M, whereas atoxyl and napharsen were ineffective. Among 9 sulfonamides investigated only sol. prontosil showed effects, shifting the pptn. zone to the acid region at a concn. of 0.0002 M. Definite correlation was proved between chemotherapeutic and colloid-chem. effects in some cases (trypanflavine, rivanol, quinine, optoquine, and eucupine). István Flórály

KELZTUS, L. 1951

(Physiol. and Path. Inst. U. of Debrecen)

"Properties and Effects of Procain-azo-protein/"

Acta Physiol (Budapest), 1951 2/1 suppl (49)
No abst. in Exc. Med.

S. R.
1951

*Biological Chemistry
1/6 Pathology*

Animal experiments with histamine-azoproteins. I. Went and L. Krasztyn (Univ. Debrecen, Hung.). *Acta Med. Acad. Sci. Hung.* 2, 89 (1951). *p*-Aminosalicylic acid was diazotized and coupled with histamine to give histamine-2-azoxetanilide, which was boiled with NaOH to give 2-(*p*-aminobenzeneazo) histamine, m. 241-3°. The latter was coupled to horse- and cattle-serum proteins. The synthetic proteins were injected into rabbits and each of the 2 resulting immune serums reacted with both synthetic proteins but did not react with the natural ones. Rats immunized with histamine-azoprotein are resistant to 8 mg. histamine given subcutaneously. Guinea pigs were treated with rabbit immune serums and found resistant to lethal histamine doses. Histamine was incubated with rabbit immune serum and the mixt. was well tolerated when each 0.5 cc. serum contained 1 mg. histamine. In expts. with isolated heart and intestine preps. 100 γ histamine/cc. serum was inactivated. In expts. with acute histamine poisoning, immunized guinea pigs were resistant to 20-25 mg. histamine/kg. given subcutaneously. D. L. N.

GAI, I.; JAVOR, T.; KESZTYUS, L.; LAZAR, J.; NIKODEMUSZ, I.; SZILAGYI, T.; VEGH, L.

Effect of roentgen rays on diphtheria toxin. Acta physiol. hung. 2 no.
3-4:533-537 1951. (CML 22:1)

1. Of the Pathophysiological Institute and of the First Medical Clinic,
Debrecen University.