

TUROPOV, N.A.; TIGONEN, G.V.

Crystallization of glasses of the system $\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot 2\text{SiO}_2 - \text{CaO} \cdot \text{SiO}_2$ in the subeutectic region. Izv. AN SSSR. Neorg. mat. 1 no.5:763-768 My '65.

Linear rate of growth of anorthite crystals in glass at 1000°C .
Ibid.:775-779 (MIRA 18:10)

1. Leningradskiy tekhnologicheskii institut imeni Lensovetu.

I 10862-62 EWT(u)/EWT(1)/EWP(e)/EPF(n)-2/EWP(b) IJP(c) WW/WH

ACC NR: AP5026734

SOURCE CODE: UR/0363/65/001/011/2014/2019

AUTHOR: Toropov, N. A.; Tigonon, G. V.

ORG: Leningrad Technological Institute im. Lensovet (Leningradskiy tekhnologicheskii institut)

TITLE: Effect of thermal pretreatment on the crystallization kinetics of anorthite-wollastonite glasses containing added chromic oxide

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 11, 1965, 2014-2019

TOPIC TAGS: chromium oxide, crystallization, crystal growth, glass

ABSTRACT: The crystallization kinetics of the following three glass compositions were investigated: (1) pure anorthite + 0.5% Cr2O3; (2) 3-20% wollastonite and 80% anorthite + 1.0% Cr2O3; and (3) 5-40% wollastonite and 60% anorthite + 2.0% Cr2O3. Thermal pretreatment of the glasses was carried out for 2 hours at 800, 900, and 950°C. It was found that the linear growth rate of anorthite crystals under isothermal conditions does not change with time and depends only on the temperature of the thermal pretreatment. The linear growth rate of anorthite crystals from glass containing wollastonite changes with time, the change being represented by an exponential curve; this is apparently due to diffusion processes occurring during the crystallization.

Card 1/2

UDC: 666.1:542.65

L 10862-66

ACC NR: AP5028734

The relationships governing the rate of change of the crystallized part of the volume were determined. A rise in the temperature of the thermal pretreatment not only increases the rate of formation of crystallization centers but also substantially affects all kinetic parameters of the crystallization process. Orig. art. has: 3 figures, 3 tables, 3 formulas.

SUB CODE: 11,07/
20/ SUBM DATE: 27May65/ ORIG REF: 003/ OTH REF: 002

HW
Card 2/2

ASAP'YEV, B.V.; TIGRANOV, G.G., red.; KRASINSKAYA, A., red.; YARMAK, A., tekhn. red.

[Sketches of Armenia] Ocherki ob Armenii. Red.-scst. G.G.Tigranov.
Moskva, Sovetskii kompozitor, 1958. 31 p. (MIRA 11:10)
(Armenia--Description and travel)

TIGRANOV, I.M., inzhener, laureat Stalinskoy premii.

Construction of tall apartment buildings on Kotel'nicheskaia
Embankment and Insurrection Square. Gor.khoz.Mosk. 24 no.2:
9-16 F '50. (MLRA 7:11)
(Moscow--Apartment houses) (Apartment houses--Moscow)

TIGRANYAN, Abragam Khazarosovich

Optimal design of transformers with field excitation control.
Izv. vys. ucheb. zav. elektromekh. 7 no.4:423-427 '64
(MIRA 17r7)

1. Vedushchiy konstruktor Armyanskogo filiala Vsesoyuznogo
nauchno-issledovatel'skogo instituta elektromekhaniki.

GUKASYAN, M.G., inzh; TIGRANYAN, A.Kh., inzh; PAKHLEVANYAN, R.G., inzh.

Switching device for TSMi-series electric transformers. Vest.
elektroprom. 32 no.3:25-28 Mr '61. (MIRA 15:6)
(Electric transformers) (Electric switchgear)

TIGRANYAN, E.A.

Whitefish spawning grounds in lake Sevan. Izv. AN Arm. SSR.
Biol. nauki 18 no.4:78-81 Ap '65. (MIRA 78:5)

1. Sevanskaya gidrobiologicheskaya stantsiya AN Armyanskoy SSR.

PROMYSLOV, M.Sh.; TIGRANYAN, R.A.

Effect of various functional states of the central nervous system
on respiration and oxidative phosphorylation of the brain tissue
in acute closed craniocerebral injury. Vop. med. khim. 10 no.6:
611-614 N-D '64. (MIRA 19:1)

1. Nauchno-issledovatel'skiy ordena Trudovogo Krasnogo Znameni
Institut neyrokhirurgii imeni Burdenko AMN SSSR, Moskva.

PROMYSLOV, M.Sh.; TICRANYAN, R.A.

Respiration and oxidative phosphorylation of brain tissue
following cerebrocranial trauma. Zhur. eksp. i klin. med.
5 no.3:20-22 1965. (MIRA 19:1)

TIGRANYAN, R.A.

Respiration and oxidizing phosphorylation of brain tissue in a craniocerebral trauma inflicted under different functional states of the central nervous system. Zhur. eksp. i klin. med. 4 no.1: 25-29 '64. (MIRA 17:9)

1. Institut neyrokhirurgii AMN SSSR.

PROMYSLOV, M.Sh.; TIGRANYAN, R.A.

Effect of acute closed cranioserebral injury on the respiration and
oxidative phosphorylation of brain tissue. Vop.med.khim. 10 no.2:205-
207 Mr-Apr '64. (MIRA 18:1)

1. Nauchno-issledovatel'skiy ordena Trudovogo Krasnogo Znameni Institut
neyrokhirurgii imeni akademika N.N.Burdenko AMN SSSR, Moskva.

TIGRANYAN, S.T.

Geological works by the Armenian scientist A.E. Artsruni.
Trudy Inst.ist.est.1 tekhn. 37:169-175 '61. (MIRA 14:10)
(Artsruni, Andrei Eremeevich, 1847-1898)

YEREMEYEVA, S.I.; YAKOVLEV, V.B.; CHESNOVA, L.V.; SHLYKOVA, S.A.; KOZLOV, S.G.;
KHRENOV, K.K. (Kiyev); TIGRANYAN, S.T. (Yerevan); KROTIKOV, V.A. (Leningrad)

In the Soviet National Association of Historians of Science and
Technology. Vop.ist.est.i tekhn. no.10:180-187 '60. (MIRA 14:3)
(Scientific societies)

RADULET, Remus; TIMOTIN, Alexandru; TIGULEA, Andrei

Determination of the dispersion reactance of some induction furnaces
with iron core. Rev electrotechn energet 5 no.2:249-263 '60.

(EEAI 10:5)

1. Korrespondierendes Mitglied der Akademie der Rumanischen
Volksrepublik; Comite de redaction, Revue d'electrotechnique et
d'energetique, redacteur en chef (for Radulet)

(Electric furnaces) (Electric transformers)

(Induction (Electricity)) (Iron)

TIGUNTSEV, A.I., polkovnik.

Party and political work in air training. Vest.Vozd.Fl. 40 no.7:34:39

Jl '57.

(MIRA 10:11)

(Communist party of the Soviet Union--Party work)

(Aeronautics, Military)

TIGUNTSEV, G.M.

Blood circulation in the spleen of pigeons. Arkh.anat.gist.i embr. 30 no.
3:32-40 My-Je '53. (MLRA 6:6)

1. Kafedra gistologii i embriologii Molotovskogo gosudarstvennogo univer-
siteta. (Blood--Circulation) (Spleen) (Pigeons)

MOLNAR, J.; TIGYI, A.; LISSAK, K.

Changes of the nucleic acid content in the denervated sub-
maxillary gland of the dog. Acta physiol. acad. sci. Hung.
24 no.3:279-286 '64

1. Institute of Physiology, Medical University, Pecs.

TIGYI, A.; MIRISZLAI, E.; KISS, K.; LISSAK, K.

Significance of vagal afferentation in the regulation of diencephalic vegetative reactions. Acta physiol.hung. 17 no.4:401-406 '60.

1. Institute of Physiology, Medical University, Pecs.
(VAGUS NERVE physiol)
(DIENCEPHALON physiol)

Table 11

HUNG.

Effect of steroid hormones upon pulmonary neurodys-
trophy induced by vagotomy. A. Tóth, K. Lisák, and J.
Derjanez (Med. Univ., Pécs). ~~Acta Physiol. Acad. Sci.~~
Hung. C. 33-40 (1954).--Rats which were bilaterally vagoto-
mized developed fatal pulmonary infiltration (I) which was
markedly inhibited by progesterone or Lutocyclin (11-de-
oxycorticosterone acetate), was unchanged by testosterone
or folliculin, and was aggravated by cortisone. De-oxyorti-
costerone inhibited I only slightly, but prolonged the survival
time. Prolonged ether or dial anesthesia inhibited I. A
correlation between the protective effect and the anesthetic
activity of steroids of luteoid activity was suggested.
S. Ellis

MONTSKO, Tibor (Pecs, Rakoczi ut 80, Hungary); TIGYI, Andras (Pecs, Rakoczi ut 80, Hungary); ARNOLD, Istvan (Pecs, Rakoczi ut 80, Hungary); TARJAN, Jeno (Pecs, Rakoczi ut 80, Hungary)

The effect of the parathyroid on the changes of serum proteins. Acta biol Hung 12 no.3:191-197 '61

1. Institute of Physiology and Biology, Medical University of Pecs (Head: K.Lissak).

+

BERTA, Gyula; GACS, Gyula; TIGYI, Andras

Determination of the insulin content of the blood serum by means of
rat epididymal fatty tissue. Kiserl. orvostud. 14 no.5:545-548 0 '62.

1. Pecsí Orvostudományi Egyetem Eláttani Intezete.
(INSULIN) (BLOOD CHEMICAL ANALYSIS) (EPIDIDYMIS)
(FATTY TISSUE)

HUNGARY

MIRISZLAI, Erno, ~~TIGYI, Andras~~; Medical University of Pecs, Otolaryngological Clinic and Institute of Physiology (Pecsi Orvostudományi Egyetem, Ful-Orr-Gege Klinika es Elettani Intezet).

"Experimental Study of the Changes in Labyrinth Pressure in the Course of Histamine Application to Mammals."

Budapest, Kiserletes Orvostudomány, Vol XIX, No 1, Jan 67, pages 82-85.

Abstract: [Authors' Hungarian summary] The labyrinth pressure was studied in dogs and cats with the simultaneous registration of blood and intracranial pressures. The development and course of the changes in labyrinth pressure in response to the histamine effect are described. On the basis of the present experimental results it can be concluded that pressure increases arise in the labyrinth in response to histamine. In response to repeated doses of histamine, the labyrinth pressure values obtained show a decreasing tendency. The investigations prove that the intracranial pressure is in close relationship with the labyrinth pressure; in addition, changes in pressure may arise in the labyrinth independently, and they may also play a role in various pathological processes. } Hungarian, 10 Western references. [Manuscript received 4 Mar 66.]

1/1

MONTSKO, Tibor, (Pecs, Rakoczi ut 80, Hungary.); TIGYI, Andras, (Pecs, Rakoczi ut 80, Hungary.); ARNOLD, Istvan, (Pecs, Rakoczi ut 80, Hungary.); TARJAN, Jenő, (Pecs, Rakoczi ut 80, Hungary.)

The effect of the parathyroid on the changes of serum proteins.
Acta biol Hung 12 no.3:191-197 '61.

1. Institute of Physiology and Biology, Medical University of Pecs,
(Head: K. Lissak).

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PUPPI, A.; BENEDECZKY, I.; TIGYI, A.; LISSAK, K.

Identification of dopamine-containing granules in the adrenal medulla. Acta physiol. acad. sci. Hung. 27 no.4:341-347 '65.

1. Institute of Physiology, University Medical School, Pecs.

HOLLOSI, Gabor; BENEDICZKY, Imre; TIGYI, Andras; LISSAK, Kalman

The role of the nervous system in the maintenance of the ribonucleic acid and deoxyribonucleic acid content of striated muscle tissue.
Acta biol Hung 11 no.2:145-153 '60. (EEAI 10:2)

1. Institute of Physiology and Biology, Medical University, Pecs
(Head: K.Lissak)

(RIBONUCLEIC ACIDS) (NUCLEIC ACIDS)
(NERVOUS SYSTEM) (MUSCLES)
(DEOXYRIBONUCLEIC ACIDS)

BENEDECZKY, I.; PUPPI, A.; TIGYI, A.

Histochemical and electron microscopical study of the adrenal medulla of the grass snake (*Natrix natrix*). *Acta biol. acad. sci Hung.* 15 no.3:271-284 '65

1. Institute of Physiology and Biology, Medical University, Pecs (Head: K. Lissak).

BENEDECZKY, I.; PUPPI, A., TIGYI, A.; LISSAK, K.

Electron microscopic study of adrenaline and noradrenaline
secretion of the adrenal medulla. Acta biol. acad. sci. Hung.
15 no.3:285-298 '65

1. Institute of physiology and biology, Medical University,
Pecs (Head: K. Lissak).

TIGYI, Andras (Pecs, Rakoczi ut 80.); BENEDMCKY, Istvan (Pecs, Rakoczi ut 80.); LISSAK, Kalman (Pecs, Rakoczi ut 80.)

Studies on the modifying effect of isolated desoxyribonucleic acid in mammals. In English. Acta biol.Hung. 10 no.2:197-205 '59.

(BBAI 9:5)

1. Department of Physiology and Biology, Medical University of Pecs.
(Mammals) (Deoxyribonucleic acids)

TIGYI, Andras; LISSAK, Kalman

The role of neuro-humoral factors in the development of experimental pulmonary edemas. Tuberkulozis 12 no.2:25-32 Feb 59.

1. A Pecsí Orvostudományi Egyetem Elettani Intézete közleménye.

(PULMONARY EDEMA, exper.

induction by bilateral cervical vagotomy & other methods,
neuro-endocrine mechanism of develop. (Hun))

(VAGOTOMY, exper.

induction of pulm. edema by bilateral cervical vagotomy,
neuro-endocrine mechanism of develop. (Hun))

(NERVOUS SYSTEM, physiol.

neuro-endocrine mechanism of develop. of pulm. edema
induced by bilateral cervical vagotomy & other methods
(Hun))

(ENDOCRINE GLANDS, physiol.

same)

11071, 17
KISS, Ivan; LISSAK, Kalman; TIGYI, Andras

Modification of London's method for angiostomy. Kiserletes orvostud
orvostud 9 no.5-6:550-553 Oct-Dec 58.

1. Pecsí Orvostudományi Egyetem Mlettani Intezete.

(BLOOD VESSELS, surg.

angiostomy, modification of London's method by use of
new cannulae (Hun))

MONTSKO, T.; TIGYI, A.; BENEDECZKY, I.; LISSAK, K.

Electron microscopy of parathyroid secretion in *Rana esculenta*.
Acta biol. acad. sci. Hung. 14 no.2:81-94 '63.

1. Department of Physiology and Biology, Medical University,
Pecs (Head: K. Lissak).

(PARATHYROID GLANDS) (HYPERPARATHYROIDISM)
(HYPOPARATHYROIDISM) (HYPERCALCEMIA)
(HYPOCALCEMIA)

MOLNAR, J.; TIGYI, A.; LISSAK, K.

Changes of the nucleic acid content in the denervated submaxillary gland of the dog. Acta physiol. acad. sci. Hung. 24 no.3:279-286 '64

1. Institute of Physiology, Medical University, Pecs.

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L 15499-66

ACC NR: AT6007445

SOURCE CODE: HU/2505/65/026/00X/0048/0048

AUTHOR: Lissak, K.; Tigyi, A.; Benedeczky, I.; Puppi, A.

17
B-1

ORG: Medical University of Pecs, Institute of Physiology (Pecsi Orvostudományi Egyetem, Elektani Intezet)

TITLE: Electron-microscopic identification of the catecholamine substances of the adrenal medulla. [This paper was presented at the 29th Meeting of the Hungarian Physiological Society held in Szeged from 2 to 4 July 1964]

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 26, Supplement, 1965, 48

TOPIC TAGS: animal physiology, amine, endocrinology, gland, biologic secretion, electron microscopy, experimental animal

65

ABSTRACT:

Following a general ultrastructural analysis of adrenal medullary secretion in different mammalian species, the identification of the secretory granules (sg) is discussed. In some cells of the adrenal medulla of the frog and grass snake, adrenalin-containing sg 1000 Å in diameter, in some other cells sg containing noradrenalin and 3000 Å in diameter can be detected. In the rat, mouse and dog, the two granules are

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L 15199-66

ACC NR: AT6007445

present in the same calls. The difference in size and specific gravity between the two types of sg are also confirmed by ultracentrifugal fractionation. The adrenalin activity of the small granules is supported by the evidence obtained from insulin loading experiments in rats as well. In addition to the two types of granules discussed above, a third type has also been observed. These granules are 0.5-1.5 μ in size, possess a fine internal structure and are surrounded by a membrane. On the basis of ultracentrifugal fractionation and chemical determinations, these structures are believed to represent precursor granules containing dopamine. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 2/2

L 15503-66

ACC NR: AT6007449

SOURCE CODE: HU/2505/65/026/00X/0050/0050

AUTHOR: Tigyí, A.; Montsko, T.; Benedeczky, I.

19
B+1

ORG: Medical University of Pecs, Institute of Physiology (Pecsi Orvostudományi Egyetem, Elettani Intezet)

TITLE: Electron-microscopic studies of the secretory activity of the parathyroid gland / This paper was presented at the 29th Meeting of the Hungarian Physiological Society held in Szeged from 2 to 4 July 1964/

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 26, Supplement, 1965, 50

TOPIC TAGS: electron microscopy, gland, endocrinology, biologic secretion, experimental animal, animal physiology

ABSTRACT: Results obtained in experiments with the frog, *Rana esculenta*, are discussed. The secretory product is accumulated in secretory granules in the state of both normal function and hyperfunction. The appearance of the secretory granules is dependent on their genesis and on the functional state of the gland. The first change in the course of formation is the appearance of large numbers of empty vesicles in the Golgi apparatus, followed by a gradual separation of these

Card 1/2

L 15503-66

ACC NR: AT6007449

vesicles from the Golgi apparatus, the condensation of fine granular elements around and their penetration into the empty vesicles. In the next phase, lamellar elements appear in the granule; they are apparently ergastoplasmic in nature. The internal homogeneity of the mature secretory granules is a result of a dissolution of the above mentioned elements. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 2/2

TIGYI, A.,; LISSAK, K.

Examination of the adaptation system of the organism in vagus-pneumonia. Acta physiol. hung. 8 no.2:231-236 1955.

1. Institute of physiology of the medical university, Pecs.
(PNEUMONIA, experimental,
vagus pneumonia, eff. of stress)
(STRESS, effects,
on vagus pneumonia in rats)
(NERVES, VAGUS, physiology,
vagus pneumonia, eff. of stress in rats)

17941, H

med

2438. Adaptation system in vagus pneumonia. A. Tigvi and K. Lissak *Acta Physiol. Acad. Sci. hung.*, 1955, 8, 231-236 (Physiol. Inst., Med. Univ., Pécs, Hungary).—Bilateral cervical vagotomy was carried out in rats which previously had been treated with adrenaline, cold, pain and formaldehyde. Survival time and degree of pulmonary oedema (lung wt./body wt. ratio and histology) were determined. Survival time was longer, pulmonary oedema either did not develop or was minimal compared with unstressed controls. When both of the 2 parabiotic rats had been stressed by pain and one of them was vagotomised the survival time of the vagotomised rat was only a little longer than that of control rats and pulmonary infiltration also developed. The non-vagotomised partner survived and had no pulmonary oedema. When one of the 2 parabiotic rats had been stressed and the other vagotomised it died and developed oedema as control rats did. Stress protects adrenalectomised and thyroidectomised rats against death and pulmonary infiltration induced by vagotomy almost as well as it does normal ones. (Hungarian)

2

A. B. L. BEZNAK

TIRYI 4

Effects of steroid derivatives on the neuromuscular system. II. In vitro effect of steroid hormones on skeletal muscle strength.

L 32151-66 RM

ACC NR: AT6023523

SOURCE CODE: HU/2505/65/027/002/0093/0099

AUTHOR: Molnar, Janos--Mol'nar, Ya.; Tigyi, Andras--Tidi, A.; Lissak, Kalman--
Lishshak, K.; Juhasz, Peter--Yukhas, P. 37

ORG: Institute of Physiology, Medical University of Pecs (Pecsi Orvostudományi
Egyetem, Elettani Intezet) B+1

TITLE: Effect of prolonged pilocarpine treatment on the nucleic acid and nitrogen
content of the denervated submaxillary gland of the dog

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 27, no. 2, 1965, 93-99

TOPIC TAGS: gland, nitrogen, nucleic acid, RNA, DNA, dog, drug effect, gland drug

ABSTRACT: The changes in the nucleic acid and nitrogen content of the denervated
submaxillary glands, brought about by prolonged pilocarpine treatment, have been
studied in dogs. The effect of the denervation was decreased by pilo-
carpine treatment of 8-12 days' duration. No significant changes were ob-
served in the RNA content, in terms of 100 mg wet tissue. The rise in the
DNA content was diminished. The otherwise considerable lowering of the
RNA content of the denervated glands was reduced to 10-17 per cent by
the pilocarpine treatment. There was no significant difference in the total
DNA content between the denervated, pilocarpine-treated and the control glands.
Following transection of the chorda tympani, the total nitrogen content of
the glands was significantly increased by prolonged pilocarpine treatment.
Orig. art. has: 5 figures. [Orig. art. in Eng.] [JPRS]

SUB CODE: 06 / SUM DATE: 15 May 64 / ORIG REF: 003 / OTH REF: 020

Card 1/1/5

0915 7483

L 33787-66 RO

ACC NR: AT6025179

SOURCE CODE: HU/2505/65/028/001/0041/0045

AUTHOR: Molnar, Janos--Mol'nar, Ya. (Pecs); Tievi, Andras--Tid'i, A. (Pecs); Lissak, Kalman--Iishshak, K. (Pecs); Juhasz, Peter--Yukhas, P. (Pecs)

ORG: Institute of Biology, Medical University of Pecs (Pecsi Orvostudományi Egyetem, Biológiai Intézet)

TITLE: Effect of prolonged atropine administration on the nucleic acid and nitrogen contents of the submaxillary gland of dogs

SOURCE: Academia scientiarum hungaricae. Acta physiologica, v. 28, no. 1, 1965, 41-45

TOPIC TAGS: dog, RNA, gland, pharmacology

34
BT1

ABSTRACT: The effect of chronic atropine administration on the nucleic acid and nitrogen content of the submaxillary gland has been studied in dogs. After 11 days of treatment, there was a 14 percent increase in RNA concentration and a 16 percent increase in the RNA content. The total nitrogen concentration was 13, the nitrogen content 21 percent higher in the atropinized than in the untreated glands. The dry matter content of the atropinized glands increased considerably. The results obtained are in contradiction with the observation of Emmelin et al. that chronic atropine administration gives rise to the same changes as does transection of the chorda tympani. Orig. art. has: 3 figures and 1 table. [Orig. art. in Eng.] [JPRS: 33,500]

SUB CODE: 06 / SUBM DATE: 06Aug64 / ORIG REF: 002 / OTH REF: 015

Card 1/1

0916 0543

L 37815-66 T JK

ACC NR: AP6028452

SOURCE CODE: HU/0018/66/000/003/0231/0236

AUTHOR: Tomcsanyi, Tihamer--Tomchan'i, T.; Szabo, Denes--Sabo, D.; Tigyi, Andras--Tid'i, A.ORG: Institute of Physiology and Biology, Medical University of Pecs (Pecsi Orvostudományi Egység, Elettani és Biológiai Intézet)

TITLE: Fractionation of mammalian DNA-s on methylated albumen

SOURCE: Kiserletes orvostudomány, no. 3, 1966, 231-236

TOPIC TAGS: chromatography, DNA, animal, liver

ABSTRACT:

The chromatographic behavior of DNA-s isolated from the thymus, liver and spleen of cattle and dogs was studied on methylated albumen using the fractional elution technique. Within a given species, the DNA-s of different organs behaved in a similar manner. The DNA-s of the two species, however, differ in their chromatographic behavior. Elution from the methylated albumen occurred at 0.8 M NaCl concentration in case of the main fraction of cattle DNA, and at 0.9 M NaCl concentration in case of the corresponding dog DNA fraction. Orig. art. has: 6 figures and 1 table. [JPRS: 36,599]

SUB CODE: 06 / SUBM. DATE: 13Feb65 / ORIG REF: 001 / OTH REF: 008

Card 1/1/111P

0917 2207

MONTSKO, Tibor (Pecs, Rakoczi ut 80, Hungary); ~~TIGYI, Andras~~
(Pecs, Rakoczi ut 80, Hungary); ARNOLD, Istvan (Pecs, Rakoczi
ut 80, Hungary); TARJAN, Jeno (Pecs, Rakoczi ut 80, Hungary

The effect of the parathyroid on the changes of serum proteins.
Acta biol Hung 12 no.3:191-197 '61.

1. Institute of Physiology and Biology, Medical University
of Pecs (Head:K.Lissak).

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TIGYI, A.; LISSAK, K.

Studies on the pathogenesis of vagus pneumonia. Acta physiol. hung. 6 no.4:477-483 1954.

1. Institute of Physiology, University Medical School, Pecs.
(PNEUMONIA, exper.
vagus pneumonia in cats, pathogen.)
(NERVES, VAGUS, surg.
vagotomy, cervical inducing pneumonia in cats, pathogen.)

TIGYI, A.; LISSAK, K.; DERJANETZ, J.

Effect of steroid hormones upon pulmonary neuro-dystrophy induced by vagotomy. Acta physiol. hung. 6 no.1:33-40 1954.

1. Institute of Physiology of the Medical University, Pecs.

(LUNGS, pathol.

infiltration induced by cervical vagotomy in rats, eff. of steroids)

(STEROIDS, eff.

on pulm. infiltration induced by cervical vagotomy in rats)

(NERVES, VAGUS, physiol.

cervical vagotomy inducing pulm. infiltration, eff. of steroid hormones in rats)

TIGYI, A.

ENDROCZI, E.; LISSAK, K.; SZEP, C.; TIGYI, A.

Examinations of the pituitary-adrenocortical-thyroid system after ablation of neocortical and rhinencephalic structures. Acta physiol. hung. 6 no.1:19-31 1954.

1. Institute of Physiology of the Medical University, Pecs.

(ADRENAL CORTEX, physiol.

pituitary-adrenocortical-thyroid system, eff. of rhinencephalic & neocortical decortication in cats)

(PITUITARY GLAND, physiol.

pituitary-adrenocortical-thyroid system, eff. of rhinencephalic & neocortical decortication in cats)

(THYROID GLAND, physiol.

pituitary-adrenocortical-thyroid system, eff. of rhinencephalic & neocortical decortication in cats)

(CEREBRAL CORTEX, eff. of excis.

neocortical & rhinencephalic decortication, eff. on pituitary-adrenocortical-thyroid system in cats)

TIGYI, A.; LISSAK, K.

Studies on the pathogenesis of vagus pneumonia. Acta med. hung.
Suppl. 6 no.1:110-114 1954.

1. Physiologisches Institut der Medizinischen Universität, Pecs.
(PNEUMONIA, exper.
vagus pneumonia, pathogen, in rats)

Tigyi, B. A.

✓ 2435. Pathogenesis of vagus pneumonia. A. Tigyi and K. Liszák. *Acta physiol. Acad. Sci. Hung.*, 1954, 6, 477-485 (Inst. of Physiol. Med. Univ., Pécs, Hungary).—Wt. increase and histological changes in the lungs following bilateral vagotomy were determined in: (1) cats following thoracic sympathectomy, stellate and 5 trunk ganglia extirpation, (2) rats with adrenal demedullation (Evans' method) (3) lydergin treated rats, (4) thyroidectomised rats, (5) in rats whose mesencephalon had been transected between the colliculi and (6) in rats whose hypothalamic mammillary regions had been destroyed bilaterally with a stereo-tactic instrument. With the exception of thyroidectomy all the other operations completely prevented the development of vagus pneumonia. It is suggested that the latter develops as a consequence of destruction of the vagal afferent and efferent fibres which allow a sympathetic activation via post. hypothalamus to the sympathetic pulmonary fibres; these in turn bring about the circulatory and permeability changes in the lungs known as vagus pneumonia. (Hungarian)

Med 2

A. B. L. BRZNAK.

TEST A

TIGYI, A.

TOTH, K.; ENDROCZI, E.; TIGYI, A.

The effects of steran derivatives on the neuro-muscular system.
II. In vitro effect of steroid hormones on mammalian smooth
muscle. Acta physiol. hung. 5 no.3-4:421-425 1954.

1. Institute of Physiology of the Medical University, Pecs.
(Received September 14, 1953)

(SEX HORMONES, eff.)

*on intestines, in vitro eff. in cat)

(ADRENAL CORTEX, hormones

*in vitro eff. on intestines in cat)

(INTESTINES, eff. of drugs on

*adrenal cortex hormones & sex hormones, in vitro eff. in cat)

L 13503-66

ACC NR: AP6007043

SOURCE CODE: HU/0018/65/017/003/0273/0276

AUTHOR: Szabo, Denes--Sabo, D.; Tomcsanyi, Tihamer--Tomchani, T.; Tigyi, Andras--Tidi, A.

ORG: Medical University of Pecs, Institute of Physiology and Biology (Pecsi Orvostudományi Egyetem, Elettani és Biológiai Intézet)

23
B

TITLE: Study of the base composition of canine DNA

SOURCE: Kiserletes orvostudomány, v. 17, no. 3, 1965, 273-276

TOPIC TAGS: dog, DNA, paper chromatography, heterocyclic base compound, chemical composition, biochemistry

ABSTRACT: The base composition of the DNA of the dog thymus, spleen and liver was determined by means of paper chromatography. The results indicate that the different organs of the dog have an identical base ratio. The guanine-cytosine content of the canine DNA is 42.6 per cent, as in other mammalian species. The amount of 5-methylcytosine is 0.88 per cent lower than in the DNA of calves. Orig. art. has: 4 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 16Jul64 / ORIG REF: 002 / OTH REF: 003

Card 1/1 NW

MOLNAR, J.; TIGYI, A.; LISSAK, K.; JUHASZ, P.

Effect of chronic atropine treatment on the nucleic acid and nitrogen content of the dog's submaxillary gland. Acta physiol. acad. sci. Hung. 28 no. 1:41-45 '65.

1. Institute of Physiology and Biology, University Medical School, Pecs. Submitted August 6, 1964.

L 10335-66
ACC NR: AP6003345

SOURCE CODE: HU/0018/65/017/002/0160/0163

AUTHOR: Miriszlai, Erno--Mirislai, E.; Tigyi, Andras--Tidi, A. 19

ORG: Otolaryngological Clinic and Institute of Physiology, Medical University of Pecs (Pecsi Orvostudományi Egyetem Ful-orr-gegeklínikája és Elettani Intézete) B

TITLE: Data on the experimental determination of labyrinth tension in mammals

SOURCE: Kiserletes Orvostudomány, v. 17, no. 2, 1965, 160-163

TOPIC TAGS: experiment animal, animal physiology, otolaryngology, physiologic parameter

ABSTRACT: Experiments were conducted on mammals on the measurement of tension in the labyrinth. The normal tension in the labyrinth of dogs and cats was found to be 35 ± 9 mm H₂O. In contradiction to previous theories, it was shown that the quantitative aspects of labyrinth pressure and skull pressure are not identical. The method reported permits the simultaneous registration of skull, labyrinth and blood pressures; this provides a valuable opportunity for the study of components which affect the labyrinth pressure, the special fluid space circumstances of the inner ear. Orig. art. has: 1 table. [JPRS]

SUB CODE: 06 / SUBM DATE: 22Apr64 / ORIG REF: 001 / OTH REF: 016

Card 1/1

TIGYI, A. 1951

(Physiol. Inst. U. of Pecs.)

"Sensitivity of the Denervated Brochial Musculature."

Acta Physiol. Budapest, 1951 3/1 suppl (13)
No abst. in Exc. Med.

TIGYI, A.

"Data on the Mechanism of the Increase of Sensitivity Caused by Denervation". p.293, (KISERLETES ORVOSTUDOMANY. Vol.5, No. 4, July 1953, Budapest, Hungary).

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

TIGYI, Andras; LISSAK, Kalman; DEGRE, Miklos; PETER, Karoly

Role of neurohormonal factors in pathological changes in lungs.
Magy. Tudom. Akad. Biol. Orv. Oszt. Kozl. 8 no.1-2:86-89 1957.

1. A Pecszi Orvostudományi Egyetem Elettani Intezete.

(VAGOTOMY, exper.

vagus pneumonia, role neurohormonal factors in exper.
animals (Hun))

(PNEUMONIA, exper.
same)

RULL, Janos, dr.; TIGYI, Andras, dr.; MIRISZLAI, Erno, dr.; BAUER, Miklos, dr.

A quantitative method for the study on expectoration. Fulorrgegyo-
gyaszat 8 no.1:36-41 Mr '62.

1. A Pecsí Orvostudományi Egyetem Ful-, Orr-, Gegeklínikájának
(Igazgató: Alföldy Jeno dr. egyetemi tanár) és Élettani Intézetének
(Igazgató: Lissak Kalman dr. egyetemi tanár) közleménye.

(COUGH)

MOLNAR, J.; TIGYI, A.; LISSAK, K.

Connection between vagal afferentation and higher nervous activity.
Acta physiol.hung. 18 no.1:19-26 '60.

1. Institute of Physiology, Medical University, Pecs.
(VAGUS NERVE physiology)
(CENTRAL NERVOUS SYSTEM physiology)

JUHASZ, P.; TIGYI, A.; LISSAK, K.

Effect of indirect stimulation on the nucleic acid content of the rat muscle. Acta physiol. acad. sci. Hung. 25 no.1:5-10 '64.

1. Institute of Physiology and Biology, University Medical School, Pecs.

TIGYL, A.

Endroczi, E. Tigyl, A.

"The effect of steroid compounds on the neuromuscular system. I. Effects in vitro on the striated muscle of the frog." p. 287.

(Acta Physiologica Academiae Scientiarum Hungaricae. Vol. 4, No. 3/4, 1953, Budapest.)

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

HUNGARY

BERTA, Gyula; GACS, Gyula; TIGYI, Andras; Institute of Physiology of the Medical University (Orvostudományi Egyetem Elettani Intézete), Pécs.

"Determination of Serum Insulin Concentration by Means of Rat Epididymal Fat Tissue."

Budapest, Kisorlétes Orvostudomány, Vol 14, No 5, Oct 62, pp 545-548.

Abstract: [Authors' Hungarian summary] The rat epididymal fat tissue test for the quantitative determination of insulin was investigated. It was found that the normal insulin value of fasting humans is 0.10-0.30 microunits per ml, while in dogs it is 0.05-0.15 microunits per ml. The rates of glucose metabolism were also investigated and it was found that maximal glucose uptake is reached in the first hour. [16 references, predominantly Western.]

MONTSKO, T.; BENEDECZKY, I.; TIGYI, A.

Ultrastructure of the parathyroid gland in *Rana esculenta*. Acta
biol. acad. sci. hung. 13 no.4:379-388 '63.

1. Department of Physiology and Biology, Medical University, Pecs
(Head: K. Lissak).

(PARATHYROID GLANDS) (MICROSCOPY, ELECTRON) (ANATOMY)
(CELL NUCLEUS) (CAPILLARIES) (MITOCHONDRIA)
(GOLGI APPARATUS) (LIPIDS)

HOLLOSI, G.; TIGYI, A.; LISSAK, K.

Changes of nucleic acid content in gastrocnemius muscles of pigeons and turtles after denervation and tenotomy. Acta biol. acad. sci. Hung. 14 no.1:17-24 '63.

1. Institute of Physiology and Biology, Medical University, Pecs (Head K. Lissak).

(MUSCLES) (TENDONS) (NEUROSURGERY)
(DNA) (RNA) (PERIPHERAL NERVES)

LH T 1941, j

11 F

Origin of the volume contraction of muscles. J. Ernst and J. Tigy. *Kísérletes Orvostudomány* 1, 22-5(1949).— A single hypothesis is unable to explain vol. contraction of muscles. A phase of this procedure is an extremely rapid reversible process with high frequency; another phase occurs if the muscle is under tension and this shows a restricted reversibility. If the contracting muscle is hindered, it becomes stretched and by this tension crystn. takes place in the muscle substance. Vol. contraction must be due to this crystn. István Finkly

TIGYI, J.

(5)

The state of the binding of water and electrolytes in muscle. E. Ernst, J. Tigyí, and A. Zahoresek (Univ. Pécs). *Acta Physiol. Acad. Sci. Hung.* 1, 6-26(1950)(in German).—Sartorius muscles were suspended in chambers in which they were exposed to different concns. of H_2SO_4 vapors. The water content of the muscle was detd. from wet wt. and dry wt. (in *vacuo* at 100°). From these detus. a characteristic curve for the dependence of the lowering of H_2O content as a function of the vapor pressure is constructed. Similar curves for NaCl solns. of egg white proteins show a marked difference. If muscle and isotonic NaCl solns. are equilibrated in a vacuum desiccator, the muscle loses more H_2O than the NaCl soln. This indicates the role of swelling in muscle. If one sartorius is suspended in concd. Ringer soln. a 2nd one in a Ringer soln. of the same concn. contg. 1.5% lactic acid and no $NaHCO_3$, the weight-loss of both muscles is 15% in 20 to 30 min. Subsequently, during the following 30 min., the "acid" muscle takes up H_2O , whereas the other one shows a greater wt. loss. This indicates swelling of fresh muscle. Gertrude E. Perlmann

ERNST, E.; TIGYI, J.

The role of tension in the decrease of muscular volume. Acta physiol.
hung. 2 no.3-4:243-251 1951. (CML 22:1)

1. Of the Institute of Biophysics of Pecs University.

ERIST, E.;BALOG, J.;TIGYI, J.;SEBES, A.

Volume decrease and crystallization in muscle and myosin. Acta physiol.
hung. 2 no.3-4:253-259 1951. (CLML 22:1)

1. Of the Institute of Biophysics of Pecs University.

ERIST, E.; TIGYI, J.

~~muscle physiology~~
Active and automatic constituents of muscle function. Acta physiol.
hung. 2 no.3-4:261-270 1951. (CML 22:1)

1. Of the Institute of Biophysics of Pecs University.

ERUST, E.; LADANYI, G.; TIGYI, J.

Mechanical function and crystallisation in muscle. Acta physiol. hung.
2 no. 3-4:271-279 1951. (CLML 22:1)

1. Of the Institute of Biophysics of Pecs University.

ERNST, B.; TIGYI, J.; ORKENYI, J.

Frequency and time relationships in muscle volume decrease. Acta physiol.
hung. 2 no.3-4:281-291 1951. (CML 22:1)

1. Of the Institute of Biophysics of Pecs University.

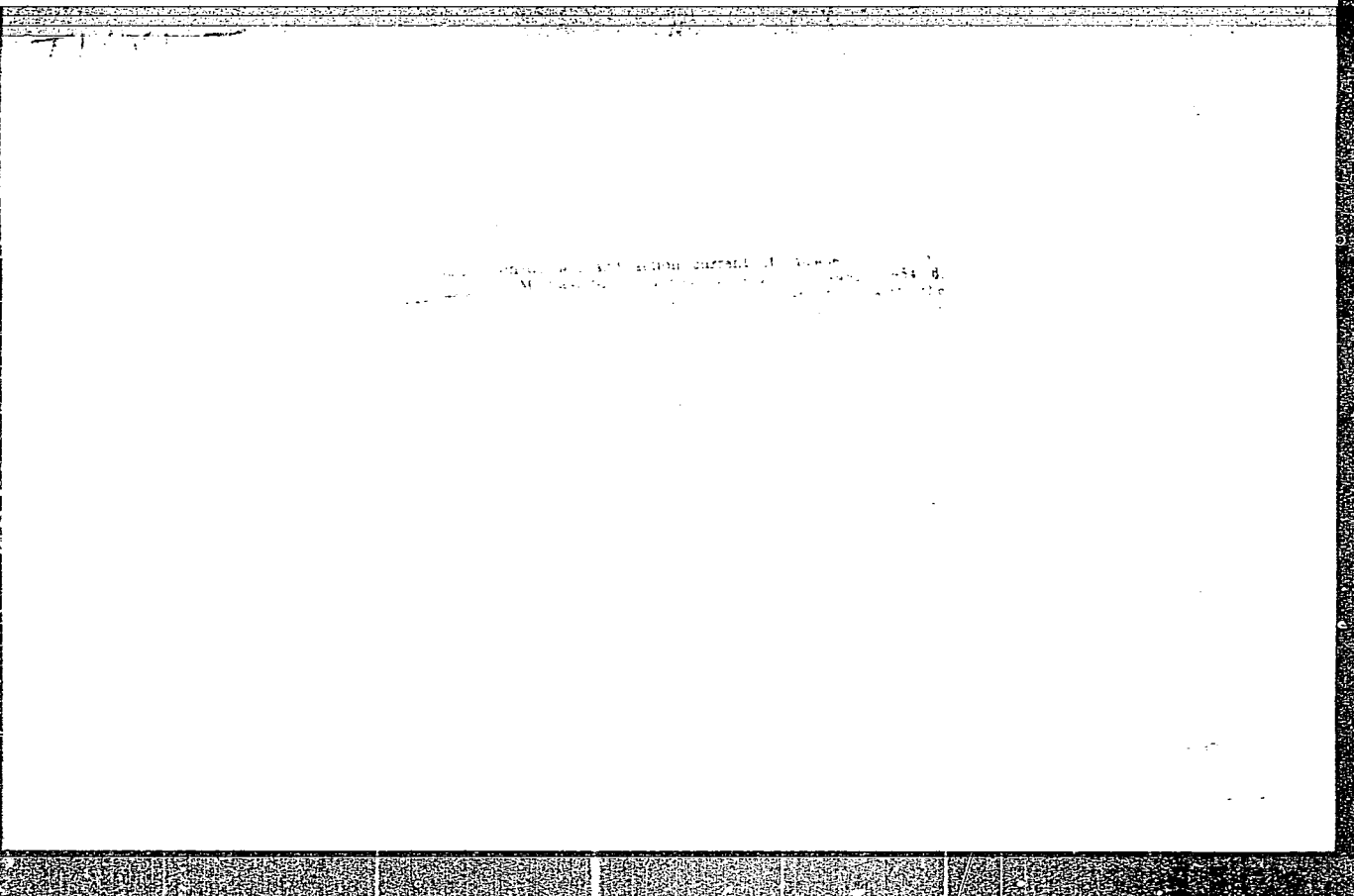
HUNG.

stretching and the water content of a series
of samples. The results are shown in
Figure 1. The data show that the
stretching of the samples leads to a
decrease in the water content. This
effect is more pronounced at higher
stretching ratios. The water content
of the samples decreases from about
1.4% to 0.8% when stretched with a ratio
of 1.5. At a stretching ratio of 2.0,
the water content is about 0.6%. At
some conditions, the water content
decreases to 0.4%. The results show
that the stretching of the samples
leads to a decrease in the water content.
The effect is more pronounced at higher
stretching ratios.

HUNG.

Is muscle an osmotic sac? E. Ernst and J. Tigy (Med Univ., Pecs). *Acta Physiol. Acad. Sci. Hung.* 6: 147-53

1964) in German. --A stretched gastrocnemius muscle lost 15% of its H₂O content in 24 hrs. The K and P content of the muscle at the end of 24 hrs. was 48-70% of the original content. The H₂O content of an unstretched muscle immersed in 0.75 M increased 15-20% but there was no change in its ash content, and a loss of 10-18% K and P was observed. Water and electrolyte displacements in the muscle were not due to osmosis. Muscles are not osmotic sacs.



Tigyil J.
ERNST, E.; TIGYI, J.; SEBES, T.A.

Temperature coefficient of volume decrease of the muscle. Acta
physiol. hung. 6 no.2-3:181-190 1954.

1. Biophysikalisches Institut der Medizinischen Universität, Pecs.
(MUSCLES, physiol.
volume decrease, eff. of temperature)
(TEMPERATURE, eff.
on volume decrease of musc.)

TIGYI, J.

Potassium and phosphorus isotope exchange in active muscles. Acta
physiol. hung. 11(Suppl):7 1957.

1. Biophysikalisches Institut der Medizinischen Universität, Pecs.
(MUSCLES, metab.
phosphorus & Potassium ion exchange in active musc. in
vitro (Ger))
(PHOSPHORUS, metab.
musc., ion exchange in active musc. in vitro (Ger))
(POTASSIUM, metab.
same)

EXCERPTA MEDICA Sec 2 Vol 11/7 Physiology July 58

2964. WATER BINDING OF MUSCLE - Beiträge zur Frage der Wasserbindung des Muskels - Tigyi J. Biophys. Inst., Med. Univ., Pécs - ACTA PHYSIOL. ACAD. SCI. HUNG. 1958, 12/suppl. (77)

The contracted muscle is hypotonic. In normal Ringer solution it loses 15% of water. The P^{32} exchange is also higher. The release of water may be caused by the rise of temperature which follows the increase of metabolism. This is confirmed by the fact that the water content of muscle in Ringer solution at a temperature of 18°C. is lower than at a temperature of 0°C.

TIGYI, J.

Warmth formation of isotonicly or isometrically contracted. *Kiserletes Orvostudomány* 11 no.4:129-137 August 1959.

1. Biophysikalisches Institut der Medizinischen Universität, Pecs
(MUSCLES, physiol.)

TIGYI, Jozsef

Effect of mechanical stretching on P metabolism in the muscle.
Kiserletes Orvostud. 11 no.5:458-462 0 '59.

1. Pecsí Orvostud. Egyszem Biofizikai Intezete.
(PHOSPHORUS metab)
(MUSCLES metab)

ERNST, E.; TIGLI, J.; NIEDETZKY, A.

Cardiac automatism and radioactivity. Acta physiol. hung. 16
no.2:61-69 1959

1. Biophysikalisches Institut der Medizinischen Universität, Pecs.
(HEART, physiol.)
(POTASSIUM, radioactive)

TIGYI, J.

P - P32 exchange in active muscle. Acta physiol. hung. 16 no.2:
87-91 1969

1. Biophysikalisches Institut der Medizinischen Universität, Pecs.
(MUSCLES, metabolism)
(POTASSIUM, metabolism)

EXCERPTA MEDICA Sec 2 Vol 13/5 Physiology May 60

2225. K-Na EXCHANGE IN ACTIVE MUSCLE - Zur Frage des K-Na-Aus-
ausches im tätigen Muskel - Tilly J. Biophys. Inst., Med. Univ.,
Pécs - ACTA PHYSIOL. ACAD. SCI. HUNG. 1959, 16/2 (93-106) Tables 7
Directly excited muscle in long-term experiments loses about 20% K as compared
with indirectly excited muscle. No difference was found between K content and
K⁴²-activity uptake of indirectly excited and resting muscle. Indirectly excited
muscle in short-term experiments showed a 10-20% rise of K⁴⁰-activity compared
with resting muscle. K exchange rises with increasing K concentrations of the
bathing fluid. The rise of Na exchange and uptake is found in directly excited and
not in indirectly excited muscle.

IASZIO, M.; TIGYI, J.

Myosin crystallization in the embrace reflex. Acta physiol. hung.
16 no.2:117-122 1959

1. Biophysikalisches Institut der Medizinischen Universität, Pecs.
(REFLEX)
(MUSCLE PROTEINS, chemistry)

TIGYI, J.; SEBES, T.A.

Temperature coefficient of volume decrease of the muscle and myosin fiber in passive extension. Acta physiol. hung. 16 no.2:123-127 1959

1. Biophysikalisches Institut der Medizinischen Universität, Pecs.
(MUSCLES, physiol.)
(MUSCLE PROTEINS)

TIGYI, Jozsef, dr., docens, az orvostudományok kandidátusa

Biophysics of muscular actions. Term tud kozl 7 no.9:
398-401 S '63.

1. Orvostudományi Egyetem Biofizikai Intézete, Pécs.

HUNGARY

TIGYI, Jozsef: Biophysical Institute (Biofizikai Intezet), Pecs.

"Basic Questions of Research in Radiation Biology."

Budapest, A Magyar Tudomanyos Akademia Biologiai Tudomanyok Osztalyanak Kozlemenyei, Vol VI, No 1-2, 1963, pages 81-85.

Abstract: The physical basis of radiation and its division into ionizing and non-ionizing radiation is discussed by the author. Electromagnetic radiation sources such as UV, X- and gamma-rays, and corpuscular sources of radiation such as electron- and α -rays as well as other heavy particles are described. Some aspects of radiation chemistry and theories on the effect of radiation are presented. The role played by radiation biology in the study of molecular biology is discussed. The article was presented at the meeting of molecular biologists in Tihany, Hungary. No references.

1/1

12

VARGA-MANYI, Pirooska; TIGYI, J.

Separation of muscle excitation from contraction. Acta physiol.
acad. sci. hung. 22 no.3/4:287-291 '62.

1. Institute of Biophysics, Medical University, Pecs.
(MUSCLES) (PERFUSION)

TIGYI, J.

The effect of ultrasound treatment on the Na²⁴Na, K⁴²K and P³²P exchange in muscle. Acta physiol. acad. sci. hung. 22 no.3/4:259-266 '62.

1. Institute of Biophysics, Medical University, Pecs.
(MUSCLES) (ULTRASONICS) (ION EXCHANGE) (SODIUM)
(POTASSIUM) (PHOSPHORUS)

TIGYI, J.

Relation between mechanical tension, water content and $K^{42}K$ exchange
in the muscle. Acta physiol. acad. sci. hung. 22 no.3/4:267-271 '62.

1. Institute of Biophysics, Medical University, Pecs.
(ION EXCHANGE) (MUSCLES) (POTASSIUM)

TIGYI, J.; FAN SHIH-FANG

The effect of hypertonic solution on the contraction, resting-
and action potential of the muscle-fibre. Acta physiol.
acad. sci. hung. 22 no.3/4:293-295 '62.

1. Institute of Biophysics, Medical University, Pecs, and Physiological
Institute of the Chinese Academy of Sciences, Shanghai.
(MUSCLES) (HYPERTONIC SOLUTIONS)

HUNGARI

TIGYI, J.; Institute of Biophysics, Medical University
(Orvostudományi Egyetem Biofizikai Intézete), Pécs.

"Relation Between Mechanical Tension, Water Content and
K⁺ Exchange in the Muscle."

Budapest, Acta Physiologica Academiae Scientiarum Hungari-
cae, Vol 22, No 3-4, 1962, pp 267-271.

Abstract: [English article; author's English summary ab-
ridged] Potassium exchange in the sartorius muscle was found
to decrease significantly as a result of stretching. Stretch-
ing resulted also in significant water loss. Osmotic water
loss without stretching enhanced the potassium exchange.
Stretching affected the potassium exchange only in hyper-
tonic medium. Of 18 references, about two-thirds are Hun-
garian and one-third are western.

1/1

1962

Andersson, G., 1961, Acta Physiologica Scandinavica,
Vol. 83, No. 3-4, 1962, pp. 287-291.

"Separation of Muscle Excitation from Contraction."

Abstract, Acta Physiologica Scandinavica 1962,
Vol. 83, No. 3-4, 1962, pp. 287-291.

Abstract: [English article; Authors' English summary].
The gastrocnemius muscle of the Lewin-Frendelburg is
perfusion perfused with hypertonic solution the acti-
vity signifying excitation can be separated from con-
traction. When the muscle is perfused with normal solu-
tion following, prior perfusion with hypertonic so-
lution, contraction is seen the appearance of the action
potential. Of 5 references, 2 are Hungarian and 3 are in
German.

1/1

HUNGARI

FIGLI, J., SHIH-FANG, F.; Institute of Biophysics, Medical University (Orvostudományi Egyetem Biofizikai Intézete), Pécs, and Physiological Institute of the Chinese Academy of Sciences [Chinese version not given], Shanghai.

"The effect of hypertonic solution on the contraction, resting- and action potential of the muscle fiber."

Budapest, Acta Physiologica Academiae Scientiarum Hungaricae, Vol 22, no 3-4, 1962, pp 293-295.

abstract: [English article; authors' English summary abridged] Experiments with the microelectrode technique on isolated sartorius muscles showed a separation of stimulation and mechanical activity. Under the effect of a hypertonic solution, the contraction disappears but the resting and spike potentials persist. Later the resting potential decreases also and the spike potential ceases. The process is reversible. Of 6 references, 4 are Hungarian and 2 are western.

171

GARAMVOLGYI, N.; METZGER-TOROK, Gabriella; TIGYI-SEBES, A.

The Z- and M- formations of striated muscle. Acta physiol. acad. sci. hung. 22 no.3/4:223-233 '62.

1. Institute of Biophysics, Medical University, Pecs.
(MUSCLES) (BEES)

NESTEROV, V.P.; TIGYI-SEBES, Anna

Localization of myofibrillar potassium with sodium tetraphenylborate. Acta physiol. acad. sci. Hung. 28 no.2:97-104 '65.

1. Biophysical Institute, University Medical School, Pecs.
Submitted January 6, 1965.

TIGYI-SEBES, Anna

Localization of potassium in the myofibril. Acta physiol. acad.
sci. hung. 22 no.3/4:243-247 '62.

1. Institute of Biophysics, Medical University, Pecs.
(POTASSIUM) (MUSCLES)

L 29376-66

SOURCE CODE: HU/2505/65/028/002/0097/0104

ACC NR: AT6019804

AUTHOR: Nesterov, Vladimir Petrovich; Tigyí-Sebes, Anna

12
B+1

ORG: Biophysics Institute, Medical University of Pécs (Pécsi Orvostudományi Egyetem, Biofizikai Intézet)

TITLE: Localization of myofibrillar potassium with sodium tetraphenylborate

SOURCE: Academiae scientiarum hungaricae. Acta physiologica, v. 28, no. 2, 1965, 97-104

TOPIC TAGS: muscle physiology, biochemistry

ABSTRACT: The use of tetraphenylborate solution was recommended for the study of the localization of myofibrillar potassium. It was shown that it is possible to evaluate potassium in single elements of the sarcomere by means of tetraphenylborate treatment and interference microscopy. Potassium was found to be localized mostly in the A-bands (about 60 per cent) and partly in the Z-lines. It is possible to arrive at the conclusion that, in the muscle, potassium is mostly in an osmotically inactive, in other words, in a bound state. The authors are indebted to Prof. E. Ernst for facilities to carry out this study. Orig. art. has: 2 figures, 6 formulas, and 1 table. [Orig. art. in Eng.] [JPRS]

SUB CODE: 06 / SUM DATE: 06Jan65 / ORIG REF: 004 / OTH REF: 003
SOV REF: 002

Card 1/1 CC

MASSZI, G.; TIGYI-SEBES, Anna

The state of potassium in muscle investigated by high frequency.
Acta physiol. acad. sci. hung. 22 no.3/4:273-280 '62.

1. Institute of Biophysics, Medical University, Pecs.
(POTASSIUM) (MUSCLES)

HUNGARY

MISZELI, G., TIGYI-SEBES, A.; Institute of Biophysics, Medical University (Orvostudományi Egyetem Biofizikai Intézet), Ecses.

"The State of Potassium in muscle Investigated by High Frequency."

Budapest, Acta Physiologica Academiae Scientiarum Hungaricae, Vol 22, No 3-4, 1962, pp 273-280.

Abstract: [English article; authors' English summary abridged] The high-frequency conductance of the muscle is affected by its structure. Added ionic potassium increased the conductance while removal of the endogeneous potassium led to no conductance change confirming the view that the potassium in the muscle is in a bound state. [Of 18 references, one is Hungarian, one is Russian and the others are Western.]

1/3

HUNGARY

TILGYI-SZEBE, A.; Institute of Biophysics, Medical University (Orvostudományi Egyetem Biofizikai Intézet), Pécs.

"Localization of Potassium in the Myofibril."

Budapest, Acta Physiologica Academiae Scientiarum Hungaricae, Vol. 22, No. 2-4, 1962, pp. 242-247.

Abstract: [English article; Author's English summary abstract] Based on phase contrast microscopic examination of muscle fibers which had been incinerated with or without prior treatment with a specific potassium reagent it was concluded that bound potassium is concentrated in the anisotropic band of the sarcomere. Of 14 references, about one-third are Hungarian and two-thirds are western.

1/1