

The vertical profile of radiation balance and...

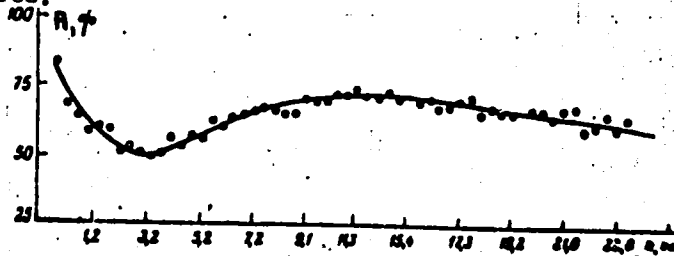
S/560/62/000/014/008/011
A001/A101

performed: on June 7, 1961, and November 14, 1961. The results of measurements are described and illustrated graphically. The maximum of radiation balance was found to take place at an altitude of 2 - 3 km. Extremal values of radiation balance were: 0.30 and 0.44 cal:cm⁻²min⁻¹. The values of albedo were calculated from the measured values of reflected and summary radiation; they are shown in Fig. 6. Albedo has maximum near the ground surface and diminishes to a minimum (~50%) at an altitude of 3.4 km. The second maximum is attained at an altitude of ~13 km. Inhomogeneities in the variation of the radiation balance were noted in both flights; they were due to horizontal inhomogeneity of the underlying surface and high concentration of aerosol in the lower atmospheric layers. In conclusion the authors enumerate the main tasks which call for solution in the immediate future. There are 6 figures.

SUBMITTED: February 26, 1962

Figure 6. Altitude distribution of albedo (November 14, 1961).

Card 2/2



ACCESSION NR: AP4009627

S/0293/63/001/003/0448/0459

AUTHOR: Kondrat'yev, K. Ya.; Gayevskaya, G. N.; Nikol'skiy, G. A.

TITLE: Balloon based studies of radiation balance in the Earth's surface-atmosphere system

SOURCE: Kosmicheskiye issledovaniya, v. 1, no. 3, 1963, 448-459

TOPIC TAGS: radiation balance, atmosphere, actinometric measurement, weather balloon, balloon based measurement, radiation balance profile, radiation balance analysis, meteorology

ABSTRACT: Standard actinometric measurements (radiation flux, loop oscillograph N-700, continuous recording; air temperature, platinum resistance thermometer; radiation detector temperature, thermocouple; air pressure, atmospheric pressure counter of the radio-sounding equipment) were taken during 11 ascents of free balloons between June 7, 1961 and Nov. 22, 1962 to a maximum altitude of approximately 30 km. Vertical profiles were compiled for the radiation balance and its components for summer and fall seasons. Analysis of the obtained data indicates that the sharpest variations occur in the lower atmospheric layer, which stretches to an altitude of 11 to 12 km in the summer and 8 to 9 km in the fall.

Card 1/2

ACCESSION NR: AP4009627

Short-wave balance ranged from 0.24 to 1.39 cal·cm⁻²·min⁻¹, total balance from 0.145 to 0.99 cal·cm⁻²·min⁻¹, across all measurements. Albedo fluctuated from 15 to 35% during summer measurements at maximum altitude. "In conclusion, the authors express their deep gratitude to I. V. Andreyev, N. M. Yevdokimova and S. V. Maryushkin for their participation in flight preparations and the processing of the data obtained." Orig. art. has: 10 graphs, 2 tables.

ASSOCIATION: None

SUBMITTED: 20Feb63

DATE ACQ: 30Jan64

ENCL: 00

SUB CODE: AS

NO REF SOV: 002

OTHER: 000

2/2

Card

GAYEVSKAYA, G. N.

KONDRAT'YEV, Kirill Y., GAYEVSKAYA, G. N., NIKOL'SKIY, G. M.,

2

"Balloon investigations of tropospheric and stratospheric radiative regime"

Report to be submitted for the 13th General Assembly, Intl. Union of Geodesy
and Geophysics (IUGG), Berkeley Calif., 19-31 Aug 63

BADINOV, I. Ya.; GAYEVSKAYA, G. N.; NIKOLSKIY, G. A.; FEDOROVA, M. P.

"Balloon investigations of radiation fluxes in the free atmosphere."

report presented at the Atmospheric Radiation Symp, Leningrad, 5-12 Aug 64.

L 17810-66 EWT(1) GW
ACC NR: AT6007607

SOURCE CODE: UR/2960/65/000/003/0018/0023

AUTHOR: Kondrat'yev, K. Ya.; Gayevskaya, G. N.; Nikol'skiy, G. A.

ORG: *none*

TITLE: The radiation balance of the atmosphere

SOURCE: Leningrad. Universitet. Problemy fiziki atmosfery, no. 3, 1965, 18-23

TOPIC TAGS: radiation balance, shortwave radiation, outgoing thermal radiation, effective radiation, direct solar radiation

ABSTRACT: The radiation balance of the atmosphere is the difference between the radiation balances of the earth's surface and atmosphere system and the balance of the ground. It is equal to the difference between the short-wave radiation absorbed in the atmosphere and the difference between the outgoing thermal radiation and the effective radiation of the ground. Both radiations forming the radiation balance of the atmosphere are variable in individual atmospheric layers, which causes the diurnal and seasonal changes in the balance. The mean annual radiation balance of the earth-and-atmosphere system is positive in the latitude belt with $\phi < 40^\circ$. The radiation balance of the ground is positive except at the polar caps. The diurnal rate of the atmospheric radiation balance is positive in the daytime and negative at night. The state of atmospheric radiation balance depends upon the balance character of individual atmospheric layers. Measurements in the summer of 1962 showed that the radiation

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L 17810-66

ACC NR: AT6007607

balance of the atmosphere and that of the earth-and-atmosphere system were positive and variable. The direct solar radiation measured at a height of 27 km was 1.41—1.59 cal/cm².min at individual launches. The albedo of the system at the height of 27 km was variable; on cloudless days it was about 19% and on cloudy days, about 34%. Orig. art. has: 1 figure, 1 table, and 4 formulas. [EG]

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 005/ ATD PRESS:

4211

Card

2/2

L 21743-66 EWT(1) GVI

ACC NR: AT6007606

SOURCE CODE: UR/2960/65/000/003/0003/0017

AUTHORS: Kondrat'yev, K. Ya. (Professor); Gayevskaya, G. N. 36ORG: Leningrad State University (Leningradskiy gosudarstvennyy universitet) B+1TITLE: Radiative temperature variations in the free atmosphere

SOURCE: Leningrad. Universitet. Problemy fiziki atmosfery, no. 3, 1965, 3-17

TOPIC TAGS: thermal radiation, atmospheric radiation, atmospheric temperature, free atmosphere, troposphere, actinometry, aerostatics, atmospheric sounding

ABSTRACT: Combined experimental data on the total radiant heat influx and on its components in the free atmosphere are given. In 1960--1963 actinometric aerostatic apparatus was developed at Leningrad State University, and 13 flights of the apparatus to altitudes of 27--29 km were made. Vertical profiles of direct solar, total, and reflected shortwave radiation, and the total radiation balance were obtained as reported by K. Ya. Kondrat'yev, G. N. Gayevskaya, and G. A. Nikol'skiy (Vertikal'nyy profil' radiatsionnogo balansa i yego sostavlyayushchikh v svobodnoy atmosfere v dnevnoye vremya. ISZ, No. 14, 1962) (see Fig. 1). The radiation balance for any level of the atmosphere can be calculated as the difference

$$B(z) = F^{\downarrow}(z) - F^{\uparrow}(z),$$

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L 21743-66

ACC NR: AT6007606

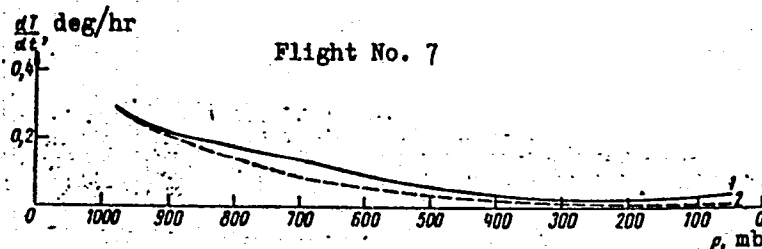


Fig. 1. Radiative temperature variations on 14 November 1961: 1 - from data on shortwave balance; 2 - from data on total radiation balance.

where F^{\downarrow} and F^{\uparrow} are the descending and ascending fluxes, and z is the level. As a rule, radiation heating decreases with an increase in layer thickness (see Fig. 2). The problem of developing methods of direct measurement of radiant heat influx is considered urgent.

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L 21743-66

ACC NR: AT6007606

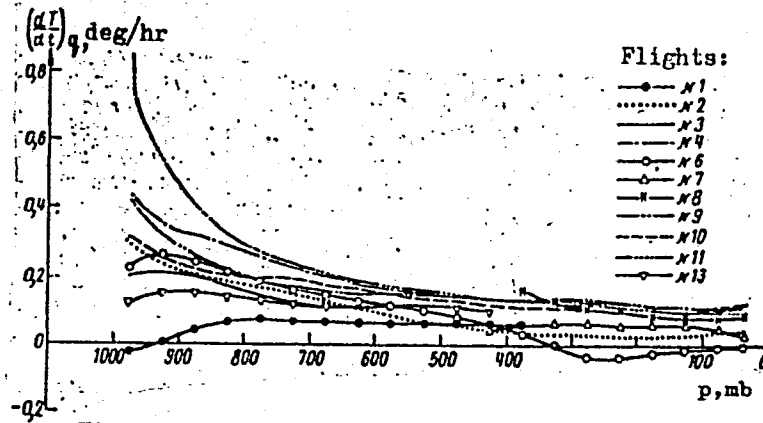


Fig. 2. Radiative temperature variations due to absorption of shortwave radiation as functions of thickness of the sounding layer.

Orig. art. has: 4 formulas, 10 graphs, and 1 table.

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 021/ OTH REF: 012
Card 3/3 *ULR*

ГАЙДУКОВА, И. С.

O Razlichnykh Rasteniy, Vbrashchennykh Iz Geneticheskoi Raznokachestvennykh Tkaney
Koriya Sakharnoy Svekly. Agrobiologiya No. 1, 1952, Vsesoyuznyy Nauchno-Issledovatel'skiy
Institut Sakharnoy Svekly, G. Kiyev

SO: Monthly List of Russian Accessions, Library of Congress, June 195~~2~~², Uncl.

GAYEVSKAYA, I.G.

Effect of pinching transplants for increasing the yield of
sugar beets. Sakh.pron. 29 no.4:35-37 '55. (MLRA 8:9)

1. VNIS

(Sugar beets)

GAYEVSKAYA, I. S.

USSR/Cultivated Plants. Decorative Plants.

M

Abs Jour : Ref Zhur-Biol., No 15, 1950, 63412

Author : Gayevskaya, I. S.

Inst : Academy of Sciences Turkmen SSR, Botanical Garden.

Title : Experiences in Rose Cultivation at the Botanical Garden of the Turkmen SSR Academy of Sciences.

Orig Pub : Izv. AN Turkmen SSR, 1957, No 4, 45-52

Abstract : Some information is given on rose cultivation, acquired as a result of observations made of the rose collection at the rosarium of the Botanical Garden of the Academy of Sciences of the Turkmen SSR. The climatic conditions prevailing at the Botanical Garden are des-

Card : 1/2

GAYEVSKAYA, I.S.

Work of the seed exchange office of the Botanical Garden of the
Academy of Sciences of the Turkmen S.S.R. Izv. AN Turk. SSR no.2:
105-106 '58. (MIRA 11:4)

1. Botanicheskiy AN Turkmenskoy SSR.
(Turkmenistan--Seed distribution)

GAYEVSKAYA, I.S.; KAMAKHIN, L.G. [deceased]

Results of the introduction of flowering plants in Ashkhabad.
Trudy Turk. bot. sada no.4:105-180 '62. (MIRA 15:7)
(Ashkhabad--Plant introduction) (Ashkhabad--Plants, Ornamental)

GAYEVSKAYA, I.S.

Growing *Allium paradoxum* (M.B.) Don. Izv. AN Turk. SSR. Ser. biol. nauk
no. 5:92-93 '62. (MIRA 15:11)

1. Botanicheskiy sad AN Turkmenskoy SSR.
(KOPET-DAG--ALLIUM)

GAYEVSKAYA, I.S.

Kentucky coffee tree (*Gymnocladus dioica* (L.) C. Koch.) in
Turkmenia. *Izv. AN Turk. SSR. Ser. biol. nauk* no.1:23-28 '64.
(MIRA 17:9)

1. Botanicheskiy sad AN Turkmenskoy SSR.

GAYEVSKAYA, K.S., kand.tekhn.nauk, dotsent

Statistical investigation of loads in operating parts of a quarry
excavator. Sbor.trud.MISI no.31:110-119. (MIRA 14:3)
(Excavating machinery)

GAYEVSKAYA, K. S., dotsent, kand. tekhn. nauk

Statistical study of loads on the working parts of open-pit excavators. Sbor. trud. MISI no.39:190-197 '61.
(MIRA 16:4)

1. Moskovskiy inzhenerno-stroitel'nyy institut imeni V. V. Kuybysheva.

(Excavating machinery)

GAYEVSKAYA, L. A.

SOV/2170

18(0,7)

PHASE I BOOK EXPLOITATION

Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov

Voprosy poroshkovoy metallurgii i prochnosti materialov, vyp. 5 (Problems in Powder Metallurgy and Strength of Materials, Nr 5) Kiyev, Izd-vo AN USSR, 1958. 172p. 2,000 copies printed.

Ed. of Publishing House: Ya. A. Samokhvalov; Tech. Ed.: V. Ye. Sklyarova; Editorial Board: I. N. Frantsevich (Resp. Ed.), I. M. Fedorchenko, G. S. Pisarenko, G. V. Samsonov, and V. V. Grigor'yeva.

PURPOSE: This collection of articles is intended for a wide circle of scientists and engineers in the research and production of powder metallurgy. It may also be useful to advanced students of metallurgical institutes.

COVERAGE: This collection of articles describes the results of investigations made at the Institut metallo keramiki spetsial'nykh splavov, AN USSR (Institute of Powder Metallurgy and Special Alloys, Academy of Sciences, Ukrainian SSR). The physical and chem-

Y
N.

Card 1/4

Card

...romium-
... investigation of the 36
... metallographic, and radio-

AUTHORS: Yeremenko, V.N., Zudilova, G.V. and Gayevskaya, L.A. 129-1-3/14

TITLE: On the Diagrams of State of the System Chromium-Niobium
(O diagramme sostoyaniya sistemy khrom-niobiy)

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, No.1
pp. 11 - 16 (USSR).

ABSTRACT: Use of niobium as an addition to chromium alloys has created an interest in the system chromium-niobium. However, very little data are published in literature on this system. Therefore, the authors investigated the manufacture by smelting and sintering of chromium alloys with niobium for the purpose of constructing the elements of the diagram of state of this system. The molten alloys were produced in a high-frequency furnace under a protective argon atmosphere from powders of electrolytic Cr-Nb of the sizes of 1 - 5 μ . The chromium was crushed in a steel ball mill and the iron removed by washing with nitric acid and then passed through a sieve with 10 000 holes/cm². The niobium powder contained 98.2% Nb, 0.93% Fe, 0.34% Ti, 0.06% Al, 0.56% Ca, 0.007% S and less than 0.01% P. The powders were mixed and pressed into briquettes, applying a pressure of 7.5 tons. A sketch of the melting device is given in Fig.1, p.11. The results of the thermal analysis

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129-1-3/14

On the Diagram of State of the System Chromium-Niobium.

are entered in Table 1, p.12. The compositions of the obtained sinter alloys are entered in Table 2, p.12; Table 3, p.15, gives the results of the decoding of the X-ray picture of the inter-metallic compound (containing 47.3% Nb); Table 4 gives the results of measuring the parameters of the lattice of a chromium-base solid solution. In Figs. 2 - 8, a few of the obtained micro-photographs are reproduced. The data given in Table 3 indicate that almost all the lines of the X-ray pictures are in agreement with the assumptions made by the authors. The diagram of state of the system Cr-Nb proposed by the author, is plotted in Fig.9, p.16. The following conclusions are arrived at: on the basis of the results of thermal, metallographic and X-ray structural analysis and measurement of the micro-hardness, it was found that in the system Cr-Nb, only one inter-metallic compound NbCr_2 forms, which has a face-centred cubic lattice; inter-metallic compounds form eutectics with chromium- and niobium-base solid solutions and the temperature of eutectoidal crystallisation of the inter-metallide with chromium-base solid solution is 1660°C (for a content of about 31 wt.% Nb) and the second eutectic point is at 1710°C for a content of 66 wt.% Nb. Primary niobium- and chromium-base

card2/3

00514520014

GAYEVSKAYA, L. I.

"The Topographoanatomical Characteristics of the Ligament Apparatus of the Coxal Articulation and Its Importance in Clinics." Cand Med Sci, Chair of Operational Surgery and Topographic Anatomy, First Leningrad Medical Institute I. P. Pavlov, Leningrad 1954. (KL, No 7, Feb 55)

SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical
Dissertation Defended at USSR Higher Educational Institutions.
(14)

GAYEVSKAYA, L.I.; KUZICHKINA, N.V. (Rostov-na-Donu)

Modification of V.V. Donskov's method used in the impregnation of argyrophil fibers in celloidin-embedded and frozen sections.
Ark. pat. 27 no.3:87-88 '65. (MIRA 18:5)

1. Eksperimental'nyy otdel (zav. - prof. M.A. Ukolova) Rostovskogo-na-Donu nauchno-issledovatel'skogo instituta rentgenologii, radiologii i onkologii (dir. - kand. med. nauk A.K. Pankov) Ministerstva zdravookhraneniya RSFSR.

USSR / Meadow Cultivation.

L

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24767

Author : Gayevskaya, L. S.; Krasnopolin, Ye. S.

Inst : Not given

Title : A Change in the Vegetative Cover in
Sheep-Raising Pastures of the Clayey Desert
and of the Foothill Semidesert in Central
Asia Under the Influence of Grazing

Orig Pub : Botan. zh., 1956, 41, No 7, 962-975

Abstract : An experiment, conducted in 1945-1950 by
the All-Union Institute of Persian Sheep-
Raising on multigrass-ephemeroidal type of
pastures in the foothill loess desert
(Samarkandskaya Oblast'), exposed the effect
of different grazing periods on the basic
fodder grasses. Carex pachystilis Gay. is

Card 1/4

A-U Sci. Res. Inst. KARAKULEVODSTVA, SAMARKAND

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24767

more inhibited at the complete alienation of its mass in the period of fruit-bearing (in the middle of spring), whereas early cutting stimulated the growth of runners. Stipa hohenackeriana Trin. reacts negatively to intensive grazing in the beginning and the end of spring. Poa bulbosa L. var. vivipara Koch. is more inhibited during perennial grazing. Due to the change in abundance of these prevailing fodder plants, it is possible to use the sedge-meadow grass pastures not more than 3 years in a row during intensive grazing and 4 years at moderate loading. Study of the grazing influence on wormwood-ephemeral type of pastures in the clayey desert was conducted

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USSR / Meadow Cultivation.

L

Abs Jour : Ref Zhur - Biologiya, No 6, 1959, No. 24767

in Kashka-Dar'inskaya Oblast'. The association of *Artemisia usbekistanika* plus *Carex pachystilis* plus *Poa bulbosa* further increases its productivity during early-spring utilization, whereas the pasture's productivity at the intensive grazing in the second half of spring decreases. In a two-seasonal spring-autumn grazing during 4 years, the effect of spring grazing alone is negative, and the autumn grazing does no harm to the ephemeral ones or to the wormwood. Wormwood-ephemeral pastures in the clayey desert, during intensive spring grazing, may be used not more than 4-5 years, 5-6 years when used in moderation; after that a seasonal change is necessary. New data on

Card 3/4

USSR/Farm Animals - Small Horned Stock

Q

Abs Jour : Ref Zhur - Biol., No 15, 1958, 69332

Author : Gayevskaya, L.S.

Inst : -

Title : Forage Base of Karakul Breeding and Prospects for Its Improvement

Orig Pub : Karakulevodstvo i zverovodstvo, 1957, No 6, 12-19

Abstract : No abstract.

Card 1/1

- 36 -

Abs Jour : Ref Zhur - Biol., No 18, 1958, 83411

Author : Gayevskaya, L.S., Kranopolin, Ye.S.

Inst : -

APPROVED FOR RELEASE: 07/19/2001
Title : Sparkling Obelisk Pastures and Their Use in Sheep Husbandry. CIA-RDP86-00513R000514520014-9

Orig Pub : Materialy po proizvodit. silan Uzbekistana, 1957, vyp. 9, 229-290.

Abstract : No abstract.

Card 1/1

PETROV, M.P., GAYFVSKAYA, L.B.

Pasture-protecting belts in deserts and their significance for
forestry. Izv. AN Turk. SSR. Ser. biol. nauk no.3:7-14 '65.
(MIRA 18:9)

1. Institut pustyn' AN Turkmenskoy SSR i Vsesoyuznyy nauchno-
issledovatel'skiy institut karakulevodstva.

CA

PROCESSES AND PROPERTIES

A colorimetric method for the determination of glucose and levulose by their osazones. V. S. Butkevich and M. S. Ginzburg. *Compt. rend. acad. sci. U. R. S. S. (N. S.)*, 3, 313-16 (1965).—Herfeld's method, *C. A.* 27, 1374, of dext. glucose in the presence of other reducing substances gives correct values (precision $\pm 2.0\%$), only when the time of heating for osazone formation is 1.5 hrs. and not 1 hr. as prescribed by H. The formation of glucosazone is about 0.5 complete in 1.5 hrs. Heating a longer or shorter period gives results that are high or low, resp. Formation of levulose osazone is complete in 1.5 hrs.; hence, it can be detd. by the same method, but the value obtained is twice the true value. Glucose and levulose can be detd. in the same soln., if the time of heating is prolonged to 5 hrs. In this case the precision is somewhat lower, exceeding 10%, if the concn. of glucose is 4 times that of levulose. W. Gordon Rose

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ABB-51A METALLURGICAL LITERATURE CLASSIFICATION

100000 02 100000 0101 001 001 011111 001 101111 001 001 101

PROCESSES AND PROPERTIES INDEX

11D

CA

Yield of citric acid from sugar on a basis for estimating the mechanism of its formation from the latter. V. S. Huthovich and M. S. Gavrushaya. *Compt. rend. acad. sci. U. R. S. S. (N. S.)*, 3, 405 (1965). An active strain of *Aspergillus niger* was grown on 100 cc. of nutrient contg. sugar 20, KNO₃ 0.20, KH₂PO₄ 0.05, MgSO₄ 7H₂O 0.01, ZnSO₄ 7H₂O 0.002 and FeCl₃ 0.0015%. Sugar soln. (20%) was introduced under the film. The solns. were then brought to pH 3 and 0.1% Mg(NO₃)₂ and KNO₃ added. The fungus was kept at 30° for 8 days on the nutrient and sugar. Both sugar and citric acid were detd. by two different methods. The yield of citric acid exceeded that obtainable for the mechanism in which it is formed from sugar by way of alc. fermentation. In expts. with sucrose the yields approach the max. If sugar were entirely changed to citric acid. A scheme is proposed in which alkyl condensation takes place in the sugar mol., forming a 5-membered ring. This is followed by oxidative breaking of the ring to give citric acid. Various other schemes proposed are discussed. C. E. P. Jeffrey

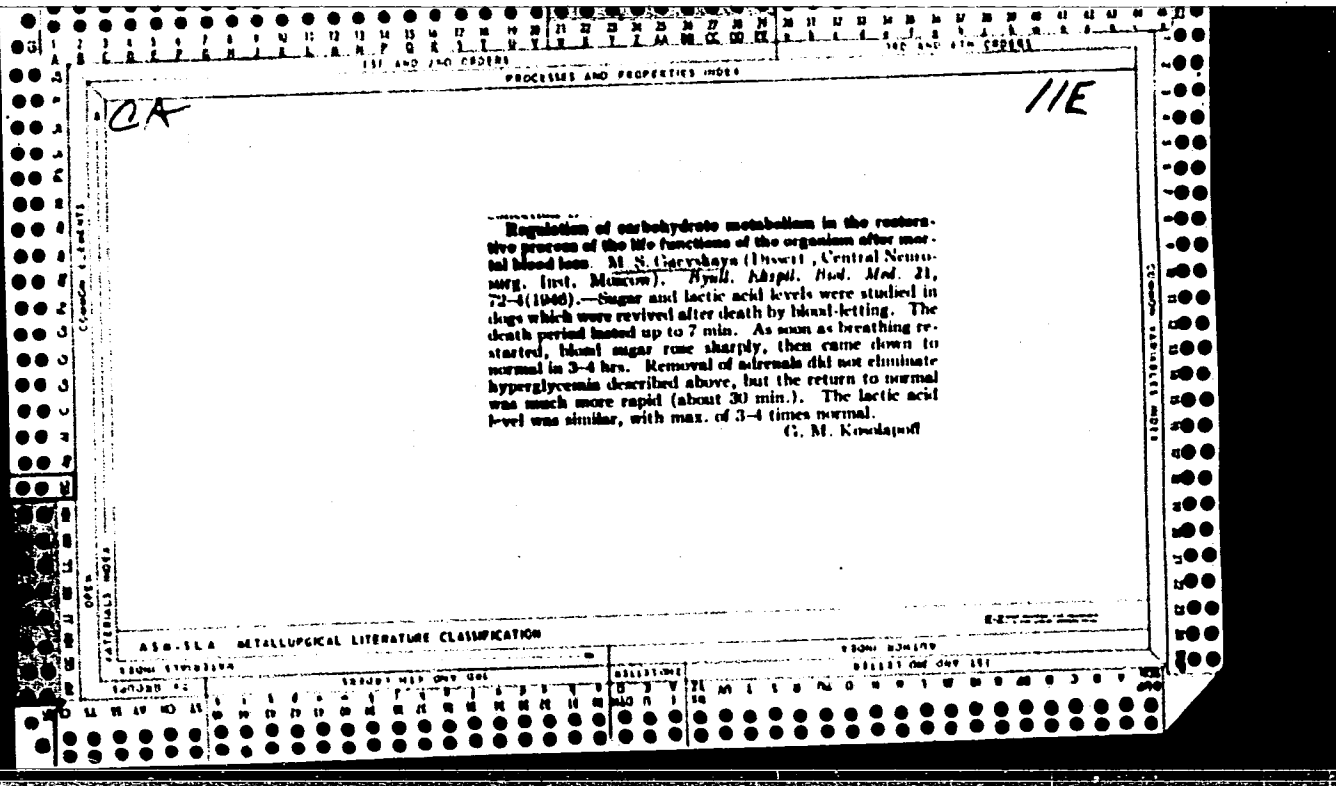
METALLURGICAL LITERATURE CLASSIFICATION

A 5 B 3 L A

HEPARIN AND ITS PROPERTIES

heparin and its properties. M. I. Shuster, M. S. Gaevskaya, M. I. Telicheva, R. N. Trshina and V. A. Negovskii. *Bull. biol. med. expt. U. R. S. S. S.* 5, 329-31 (in English) (1938).—Heparin is prepared in the following manner: The lungs of healthy cattle are freed of fat and minced. The mince is allowed to stand 5-6 days under toluene to complete autolysis, filtered and extd. for 1 hr. at 50° with 1400 cc. of 0.5 N NaOH and 140 cc. of satd. (NH₄)₂SO₄ per kg. of mince. The temp. is then rapidly raised to 80-85° and kept there for 10 min., the soln. is filtered and the residue pressed. The soln. must remain alk. to phenolphthalein throughout. The filtrate is acidified to Congo red with H₂SO₄, heated to 60° for 10 min., filtered and washed with hot 0.1% H₂SO₄, 1 l. being used for each kg. of mince. The ppt. is stored under 95% EtOH for 15 hrs., filtered and dissolved in 0.25 N NaOH (150-200 cc. per kg. of mince). The soln. is treated with 1:4 HCl until colorless to phenolphthalein but still blue to litmus. Flocculation occurs and disappears on stirring. The soln. is then filtered through gauze and heparin is pptd. with Me₂CO, washed with EtOH and dried at a temp. below 60°. The crude product is ground, dissolved in 60 vols. of distd. H₂O, filtered, centrifuged and concd. *in vacuo*. The yield is 2-3 g. per kg. of mince. The product consists of light scales readily sol. in H₂O and contg. 10.82% N, 3.83% S, 5.07% P, 21.96% ash and 13.08% moisture. One g. of the product will stabilize 2800-6000 cc. of blood for 24 hrs. S. A. Karjala

ASS. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION



CA

11F

Sugar and lactic acid in brain tissue upon fading and re-establishment of the life functions of an organism. M. S. Gaevskaya (Ministry Health, Moscow). *Arkh. Patol.* 13, No. 3, 31-41(1951).—In brain tissue of dogs dying of acute blood letting there occurs at the onset of terminal pause a preponderance of glycolysis over respiration. At the instant of onset of clinical death, free sugar vanishes and much lactic acid accumulates; the picture remains constant for the following 9 min., showing almost complete fading of glycolysis. Upon revival there is an immediate rise in free sugar and lactic acid, with a rise in glycolysis which assures a restoration of basic life functions. After 1 hr. of revival the lactic acid level reaches normal and oxidative processes take over from glycolysis; the unusually high sugar level also returns to normal after some 4 hrs. G. M. K.

GAYEVSKAYA, M.S.

~~Содержание гликогена и углеводов, готовых к ферментации, в коре головного мозга при угасании и восстановлении vital функций организма. Zh. vysshei nerv. deiat. 3 no.4:617-625 July-Aug 1953.~~
Content of glycogen and carbohydrates ready for fermentation in the cerebral cortex in extinction and restoration of vital functions of the organism. Zh. vysshei nerv. deiat. 3 no.4:617-625 July-Aug 1953.

(CJML 25:4)

1. Laboratory of Experimental Physiology for Revival of the Organism, Academy of Medical Sciences USSR.

BAKULEV, A.N., redaktor; GAYEVSKAYA, M.S., redaktor; GORIZONTOV, P.D., redaktor; GULYAYEV, A.V., redaktor; DOBRODEYEV, A.V., redaktor; MIL'CHENKO, I.T., redaktor; NEGOVSKIY, V.A., redaktor; NYROVA, P.F., redaktor; PETROV, B.A., redaktor; SARKISOV, S.A., redaktor; SEVERIN, S.Ye., redaktor; SHIKUNOVA, L.G., redaktor; NEYMAN, I.M., redaktor; BOBROVA, Ye.N., tekhnicheskiy redaktor

[Transactions of the conference dedicated to problems of pathological physiology and therapy of the terminal states in the clinic and in first aid practice; December 10-12, 1952] Trudy Konferentsii posvyashchenoi probleme patofiziologii i terapii terminal'nykh sostoianii v klinike i praktike neotlozhnoi pomoshchi, 10-12 Dekabria 1952 g. Moskva, Gos. izd-vo meditsinskoi lit-ry, 1954. 329 p. (MLRA 8:3)

1. Konferentsiya posvyashchennaya probleme patofiziologii i terapii terminal'nykh sostoyanii v klinike i praktike neotlozhnoi pomoshchi, Moscow, 1952.

(Physiology, Pathological) (Death, Apparent)

GAYEVSKAYA-SOKOLOVA, M. S.

GAYEVSKAYA-SOKOLOVA, M. S. — "Aspects of Carbohydrate Metabolism of the Cerebral Cortex under Extinction and Restoration of the Life Functions of the Organism." Acad Med Sci USSR. Moscow, 1956. (Dissertation for the Degree of Doctor in Biological Sciences)

SOURCE Knizhnaya Letopis', No 6 1956

GAJEVSKAYA, M.S.

NEGOVSKIY, V.A.; GAYEVSKAYA, M.S.

The use of suck-and-blow respirators for resuscitation [with summary
in English] Eksper.khir. 1 no.5:3-9 S-0 '56. (MLRA 10:2)

1. Iz laboratorii eksperimental'noy fiziologii po ozhivleniyu
organizma (sav. - prof. V.A.Negovskiy) AMN SSSR.

(RESPIRATORS

suck-and-blow respirator, use in resuscitation)

(RESUSCITATION, appar. and instruments

suck-and-blow respirator) "

Country : USSR T
Category : Human and Animal Physiology, Thermoregulation
Abs. Jour. : Ref Zhur - Biol., No. 2, 1959, No. 7873
Author : Gayevskaya, N.S.
Instit. : --
Title : Carbohydrate-Phosphorus Metabolism in the
Brain of the Dying Organism under Hypothermic
Conditions and with Subsequent Restoration of
Orig Pub. : Vital Functions.
V sb.: Vopr. biokhimii nervn. sistemy. Kiyev,
AN SSSR, 1957, 268--277
Abstract : In the presence of clinical death lasting 8--15
minutes, the content of adenosinepolyphosphoric
acids in the brain is markedly decreased. A
negligible amount of phosphocreatine can be
detected, whereas at ordinary body temperature
stopping blood flow for a few seconds is enough
to cause its disappearance from brain tissue.
The inorganic phosphorous content is high.
Neither the duration of dying to the onset of
the state of clinical death, nor the extent of
further reduction in body temperature of the
Card: 1/4

Country : USSR T
Category : Human and Animal Physiology, Thermoregulation
Abstr. Jour. : Ref Zhur - Biol., No. 2, 1959, No. 7873
Author :
Institut. :
Title :
Orig. Pub. :
Abstract : animal chilled to 25--26° had any effect on the content of carbohydrate-phosphorous compounds in the cortex of the brain at the 30th minute of clinical death. In almost half of the cases, at about thirty minutes of clinical death under hypothermic conditions only a minimal amount of energy sources remained in the dog cerebral cortex--the same amount which is detected at the 5th or 6th minute of clinical death at ordinary body temperature. In the other half of the experiments, a considerable amount of sugar, and
Card: 2/4

Category : Human and Animal Physiology, Thermoregulation

Abs. Jour. : Ref Zhur - Biol., No. 2, 1959, No. 7873

Author :

Title :

Orig Pub. :

Abstract : in some cases even glycogen, still remained in the cerebral cortex. For the first 8--14 minutes after the circulation was restored, processes of synthesis of the macroergic phosphorus compounds were renewed in the cerebral cortex of the reviving animal against a background of intensive aerobic glycolysis. The general direction of the changes and the speed of restoration of the metabolism of carbohydrate-phosphorus compounds in the cerebral cortex of the reviving dogs which had "died"

Card: 3/4

Country : USSR T
Category= : Human and Animal Physiology, Thermoregulation

Abs. Jour. : Raf Zhur - Biol., No. 2, 1959, No. 7873

Author :
Institut. :
Title :

Orig. Pub. :

Abstract : under hypothermic conditions were the same as
in the case of revival at ordinary body tem-
perature.

Card: 4/4

GAYEVSKAYA, M.S., NOSOVA, Ye.A., ZAKS, I.O.

Effect of body temperature on the decomposition of energy resources of
the brain in death [with summary in English]. Ukr.biokhim.zhur.
30 no.4:513-520 '58 (MIRA 11:9)

1. Laboratoriya eksperimental'noy fiziologii po ozhivleniyu organizma
AMN SSSR, Moskva.

(BODY TEMPERATURE)
(DEATH (BIOLOGY))
(CEREBRAL CORTEX)

Name: GAYEVSKAYA-SOKOLOVA, Mariya Sergey-
evna

Dissertation: Peculiarities of carbohydrate ex-
change in the cortex during the ex-
tinction and restoration of vital
functions of organisms

Degree: Doc Biol Sci

Affiliation: [not indicated]

Defense Date, Place: 6 Mar 56, Council of the Med Biol
Department of the Acad Med Sci USSR

Certification Date: 7 Jul 56

Source: BMVO 5/57

GAYEVSKAYA, M. S., and MOSOVA, E. A. (USSR)

"The effect of Fatal Loss of Blood and Subsequent Resuscitation on the variation of Nitrogen Exchange in the Brain of Dogs under Normal and Hypothermic Conditions."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 Aug 1961

GAYEVSKAYA, M.S.; NOSOVA, Ye.A.

Effect of hypothermia on the ammonia and glutamine content of the cerebral cortex of dogs in death and subsequent resuscitation.
Ukr. biokhim. zhur. 33 no.3:407-419 '61. (MIRA 14:6)

1. Laboratoriya eksperimental'noy fiziologii po ozhivleniyu organizma
AMN SSSR, Moskva.
(HYPOTHERMIA) (DEATH, APPARENT) (CEREBRAL CORTEX)

GAYEVSKAYA, Mariya Sergeevna; SHAPOT, V.S., red.; MATVEYEVA,
M.M., tekhn. red.

[Biochemistry of the brain in death and in revivification of
the organism] Biokhimiia mozga pri umiranii i ozhivlenii or-
ganizma. Moskva, Medgiz, 1963. 205 p. (MIRA 16:7)
(BRAIN) (BIOCHEMISTRY) (DEATH, APPARENT)

ACCESSION NR: AT3013141

S/3018/63/000/000/0421/0430

AUTHOR: Gayevskaya, M. S.; Nosova, Ye. A.

TITLE: Special characteristics of carbohydrate-phosphorus and nitrogen metabolism in the brain under deep hypothermia

SOURCE: Tret'ya Vsesoyuznaya konferentsiya po biokhimi i nervnoy sistemy*. Sbornik dokladov. Yerevan, 1963, 421-430

TOPIC TAGS: carbohydrate-phosphorus metabolism, nitrogen metabolism, brain tissue, hypothermia, clinical death, adenosine triphosphate (ATP), adenosinediphosphoric acid (ADP), ammonia, glutamine, free amino acids

ABSTRACT: Changes in carbohydrate, lactic acid, ATP, and ADP levels in the brain were studied in dogs under varying hypothermic conditions leading to clinical death and under normal body temperature. Both experimental and control groups of animals (male and female, age 2-4 yrs) were anesthetized generally and locally before trepanation was performed. Brains of control animals were frozen in situ with liquid nitrogen. A cortex sample from the large hemispheres of each animal was taken for analysis. Experimental animals were injected

Card 1/3

ACCESSION NR: AT3013141

with a 0.1% atropine solution (0.1 ml/kg) before being cooled with ice. In cooling animals to 32-20°C, body temperature was lowered at the rate of 1°C every 5-10 min. Brains of animals in the initial stages of hypothermia were frozen in situ, and brain tissue samples were taken and frozen immediately for animals in a state of clinical death. Sugar and glycogen, lactic acid, inorganic phosphate, adenosinphosphate, phosphocreatin, ammonia, glutamine, and free amino acids were determined in the brain tissue. Results show that moderate hypothermia (26°C) and deeper hypothermia (20°C) do not cause any serious carbohydrate-phosphorus or nitrogen metabolism disorders in the brain tissue. Carbohydrates increase while glutamic acid and gamma aminobutyric acid slightly decrease in deep hypothermia (20°C). Ammonia increases in the period preceding and during clinical death at different body temperatures, especially in moderate hypothermia (26°C). Glutamine decreases as ammonia increases at body temperatures between 37 to 26°C. But at 20°C there is no glutamine decrease, which may be attributed to the high ATP level found during clinical death in deep hypothermia. Free amino acids do not change significantly during 2 hrs of clinical death under hypothermic conditions. This indicates that protein tissue structure has not yet been damaged. Carbohydrate-phosphorus levels are higher during clinical death of

Card 2/3

ACCESSION NR: AT3013141

60-120 min at 20°C than in the fifth minute before death under normal body temperature. With higher carbohydrate-phosphorus and ATP levels in deep hypothermia, brain tissue can survive long periods of clinical death. Orig. art. has: 4 figures.

ASSOCIATION: Laboratoriya eksperimental'noy fiziologii po ozhivleniyu organisma AMN SSSR Moskva (Experimental Physiology Laboratory for Organism Resuscitation AMN SSSR)

SUBMITTED: 00

DATE ACQ: 28Oct63

ENCL: 00

SUB CODE: AM

NO REF SOV: 011

OTHER: 005

Card 3/3

PORTUGALOV, V. V.; GERSHTEYN, L. M.; GAYEVSKAYA, M. S.

"Change in the nerve cell proteins in dogs during reanimation from the state of clinical death."

report submitted for 2nd Intl Cong, Histochemistry & Cytochemistry, Frankfurt, 16-21 Aug 64.

Moscow.

Inst of Brain, AMS USSR per Obucha 5, Moscow B-120.

GAYEVSKAYA, M.S.; NOSOVA, Ye.A.; SLEZ, L.M.

Changes in the amide group content of cerebral cortex protein in
dying and resuscitation. Ukr.biokhim.zhur. 37 no.5:691-696 '65.

(MIRA 18:10)

1. Laboratoriya eksperimental'noy fiziologii po ozhivleniyu organizma
AMN SSSR, Moskva.

GAYEVSKAYA, N. S.

N. S. Gayevskaya, G. G. Abrikosov, N. A. Berezina, Z. S. Bronstein, V. I. Zatzepin, N. N. Kondakov, K. I. Meyer, V. I. Olifan, P. I. Usatchev, Z. A. Filatova, A. A. Shorigin, T. F. Chitchapova, Z. G. Shchedrin, V. A. Jashnov co-authors of the book "Definitions - Fauna and Flora of Northern Seas in USSR" edited by Prof. N. S. Gayevski, and approved by the Ministry of USSR Higher Education as a manual for universities. State Publishing "SOVIET SCIENCE", Moscow - 1948

SO: 654015

GAYEVSKAYA, N. S.

"The Trophological Trend in Hydrobiology, Its Object, Some of Its Fundamental Problems, and Its Mission," Sb. pamyati S. A. Zernova [Collection in memory of S. A. Zernov], 27, 1948.

GAYEVSKAYA, N. S.

33941. O Pishcheyevoy Elyektivnosti V Zhivotnykh-Filtratorov. Trudy Vsesoyuz. Gidrobiol. O-va, T.1, 1949, S. 159-74. Bibliogr: 21 Nazv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 46, Moskva, 1949.

GAYEVSKAYA, N.S.

O NYEKOTORYKH NOVYKH MYETODAKH V IZUCHYENII PITANIYA VODNYKH ORGANIZMOV.

30217

[Soobshch] S. N. S. Gayevskaya. Myetod bystrogo opryedyeleniya vlazhndsti organizmov. Zool. zhurnal, 1949, vyd. 5, s. 407-18

zh. Gotanika

SO: LETOPIS' NO. 34

GAYEVSKAYA, N. S.

"Experiment in the Use of Fluorescent Lamps in the Cultivation of
Protococcaceae," Byul. MOIP Otd. biol., 57, No.4, 1952

GAYEVSKAYA, N.S.

Growing mass cultures of Protococcaceae for fisheries. Trudy Gidro-
biol.ob-va 5:72-108 '53. (MLRA 7:5)

1. Kafedra gidrobiologii Moskovskogo instituta rybnoy promyshlennosti
i khozyaystva im. A.I.Mikoyana. (Algae)

GAYEVSKAYA, N.S.

Feeding habits and food relations of animals living among benthonic
vegetation and on shore refuse of the Black Sea. Report 1: Feeding
habits of the gastropod *Rissoia splendida* Eichw. Trudy Inst.okean.
8:269-270 '54. (MLRA 7:11)
(Black Sea--Gasteropoda) (Gasteropoda--Black Sea)

GAYEVSKAYA, N.S.

~~.....~~
New species for mass culture of Protococcaceae--Lagerheimia ciliata
(lagerh) Chodat. Biul.MOIP Otd.biul 59 no.1:83-84 Ja-F '54. (MLRA 7:5)
(Algae)

GAYEVSKAYA, N.S., doktor biolog.nauk; PAVLOVSKIY, Ye.N., akademik;
glavnyy red.; MAKAROV, B.M., red.isd-va, MAKUNI, Ye.V.,
tekhn.red.

[Proceedings of the Conference on Methods for the Study of
the Food Supply and Feeding Habits of Fish] Trudy Vsesoiuznogo
soveshchaniya po metodike izucheniya kormovoi bazy i pitaniya
ryb. Moskva, Izd-vo Akad.nauk SSSR, 1955. 199 p. (Trudy
soveshchaniya, no.6) (MIRA 12:6)

1. Vsesoyuznoye soveshchaniye po metodike izucheniya kormovoy
bazy i pitaniya ryb, Moscow, 1954. 2. Moskovskiy tekhn.institut
rybnoy promyshlennosti i khozyaystva imeni A.I.Mikoyana -
Mosrybvtuz. (for Gayevskaya). 3. Predsedatel' ikhtiologi-
cheskoy komissii Akademii nauk SSSR (for Pavlovskiy).
(Fishes--Food)

GATEVSKAYA, N.S.

~~_____~~
Raising mass cultures of Protococcus algae with neon lamps immersed
in the culture. Biul. MOIP. Otd. biol. 60 no.2:91-98 Mr-Apr '55.
(Algae) (Neon lamps) (MLRA 8:7)

GAYEVSKAYA, H. S.

"The role of main group of water flora in food links of reservoirs." a paper given at the 13th Limnological Congress, Helsinki, 27 July-7 August, 1956

Sum 1274

GAYEVSKAYA, N.S., professor.

Problems of utilizing unicellular algae. Priroda 45 no.4:43-51
Ap '56. (Algae--Economic aspects) (MIRA 9:7)

GAYEVSKAYA, N.S.

Nutrition and food interrelations of animals inhabiting bottom
vegetation and wracks of the Black Sea. Communication II [with
summary in English]. Biul.MOIP. Otd.biol. 61 no.5:31-46 S-0
'56. (MLRA 10:2)

(BLACK SEA--GASTROPODA)

GAYEVOKAYA, N. (Moscow)

"Sur l'etude Quantitative de l'Alimentation des Animaux Aquatiques"

Soviet paper presented at the 15th Intl. Congress of Zoology, London, 16-23 Jul 58

GAYEVSKAYA, N.S.

Feeding and food relationships of animals inhabiting the bottom
vegetation and shore fells of the Balck Sea. Report No.4:
Food of *Idothea baltica* Pallas (Isopoda) [with summary in English].
Zool. zhurn. 37 no.11:1593-1615 N '58. (MIRA 11:12)

1. Moskovskiy institut rybnoy promyshlennosti i khozyaystva.
(Golubaya Bay--Isopoda)

GAYEVSKAYA, N. S. (USSR)

"De nouvelles methodes dans l'etude, de l'alimentation des animeaux aquatiques et certains resultats de leur application."

report submitted for the 14th Intl. Limnological Congress, Vienna, 20 Aug - 8 Sept 1959.

GAYEVSKAYA, N.S.

Problems in commercial utilization of unicellular algae. Top.
ikht. no.12:144-157 '59. (MIRA 13:4)

1. Moskovskiy tekhnicheskiy institut rybnoy promyshlennosti i
khozyaystva.

(Algae--Economic aspects)

GAYEVSKAYA, N.S.

"Biology of brackish waters; inland waters," vol.22 by A.Romane,
C.Schlieper. Reviewed by N.S.Gaevskaja. Zool.shur. 38 no.7:
1110-1112 J1 '59. (MIRA 12:10)
(Hydrobiology) (Romane, A.)
(Schlieper, C.)

BORUTSKIY, Yevgeniy Vladimirovich; PAVLOVSKIY, Ye.N., akademik, otv.red.;
GAYEVSKAYA, M.S., doktor biolog.nauk, otv.red.; BOGDANOV, A.I.,
red.izd-va; DOROKHINA, I., tekhn.red.

[Key for the identification of free-living fresh-water copepods
of the U.S.S.R. and adjacent countries by fragments found in the
intestines of fishes] *Opredelitel' svobodnozhivushchikh pres-
novodnykh veslonogikh rakov SSSR i sopredel'nykh stran po frag-
mentam v kishechnikakh ryb. Moskva, Izd-vo Akad.nauk SSSR, 1960.*
117 p. (MIRA 14:1)

(Copepoda--Identification)
(Fishes--Food)

GAYEVSKAYA, N.S.

Among the titles and authors of papers and other extended participants at the 15th International Congress of Limnology in Madison, Wisconsin, 20-25 Aug. 62, are the following:

USSR

GAYEVSKAYA, N. S., Kaliningrad College of Fishery, Kaliningrad - "The role of high aquatic plants in trophic cycles of fresh water bodies"

CORUNOV, K. V., Astrakhan State Reservation, Astrakhan - "The role of cellulose bacteria in biological productivity of water bodies"

IVLEV, V. S., Svastopol Biological Station, Izumi A. O. Kovalevsky, Sovastopol - "The transformation of energy on the highest trophic levels of a production process and energy production" (Review Paper, Session 1)

KURBE, Nina Vital'yevna, Laboratory of Forestry, Academy of Sciences USSR - "The trends of water bodies on different stages of their historical development"

KROCHIN, P. V., Kamchatka Department, Pacific Institute of Marine Fishery and Oceanography - "On the connection of spawning time of young fish of red salmon with the condition in a lake"

KROCHIN, Yevgeniy Mikheylovich, Kamchatka Department, Pacific Institute of Marine Fishery and Oceanography - "The influence of a dimension of admission of red salmon producers on the phosphate regime of spawning lakes"

KUMAROV, Sergey Ivanovich, Institute of Microbiology, Academy of Sciences USSR - "The role of microorganisms in the destruction of organic substances in a water body and, decomposition processes, results and limnological significance, microbiological" (Primary Session IV)

KUZNETSOVA, Svetlana V., Bacteriologist Station, Saratov, Armenian SSR - (has accepted invitation but has not submitted paper)

PAKURKOVA, V. Ya., Zoological Institute, Academy of Sciences USSR - "On the evolution of tentipalids larvae (Chironomidae) in connection with the conditions of existence"

MAKROPOV, I. M., Laboratory of Limnology, Academy of Sciences USSR - "On the main concepts and directions of hydrobiology in the Soviet Union"

MURINA, A. G., Zoological Institute, Academy of Sciences USSR - "Microbiology of the detritus of lakes"

MURZINOV, L. L., Institute of Geography, Academy of Sciences USSR, and GUMZHI, Grigoriy I., Siberian Department of the Academy of Sciences - "The Low region of the Baykal Lake"

FRUCALANOV, N. S., Biological Faculty, Moscow University, Moscow - "Influences of small concentrations of poisonous matter on hydro-organisms", and "On the question of the influence of sewage on waters"

VORONOV, K. K., Limnological Institute, Siberian Department, Academy of Sciences USSR - "Turn-over of the organic matter and some biogenic elements in the Baykal Lake"

YAKOVLEVAYA, Aleksandra Ivanovna, Zoological Institute, Academy of Sciences USSR - "The fauna of high mountain water bodies of Middle Asia"

ZHABIN, V. I., Zoological Institute, Academy of Sciences USSR - "Migration of the radionuclide phosphorus at fertilizing a water body"

ZHURAVEL, P. A., Dnepropetrovsk Scientific Institute of Hydrobiology of the State University, Ukrainian SSR - "Acclimatization of fishes (of the Caspian relict type) in water reservoirs of the Ukraine and the Crimea"

ZENKEVICH, L.A., otv. red.; GAYEVSKAYA, N.S., red.; ZHADIN, V.I.,
red.; KOZHOV, M.M., red.; REZNICHENKO, G.G., red.

[Feeding habits of commercial marine fishes] Pitanie mor-
skikh promyslovykh ryb. Moskva, Izd-vo "Nauka," 1964.
150 p. (MIRA 17:8)

1. Vsesoyuznoye gidrobiologicheskoye obshchestvo.

ZENKEVICH, L.A., otv. red.; GAYEVSKAYA, N.S., red.; ZHADIN, V.I.,
red.; KOZHOV, M.M., red.; REZNICHENKO, O.G., red.

[Ecology of invertebrates in the southern seas of the
U.S.S.R.] Ekologiya bespozvonochnykh iuzhnykh morei SSSR.
Moskva, Izd-vo "Nauka," 1964. 156 s. (MIRA 17:6)

1. Vsesoyuznoye gidrobiologicheskoye obshchestvo. 2. Chlen-
korrespondent AN SSSR (for Zenkevich).

ZENKEVICH, L.A., *otv. red.*; BELYAYEV, G.M., *red.*; VINBERG, G.G.,
red.; GAYEVSKAYA, N.S., *red.*; ZHADIN, V.I., *red.*;
REZNICHENKO, O.G., *red.*; SHCHERBAKOV, A.P., *red.*

[Change in the biological complexes of the Caspian Sea
during the last decade] *Izmenenie biologicheskikh*
kompleksov Kaspiiskogo moria za poslednie desiatiletia.
Moskva, Nauka, 1965. 255 p. (MIRA 18:6)

1. *Vsesoyuznoye gidrobiologicheskoye obshchestvo.* 2. *Chlen-*
korrespondent AN SSSR (for Zenkevich).

GAYEVSKAYA, N.S.; POLYAKOV, G.D.; SMIRNOV, N.N.; TSIKHON-LUKANINA, Ye.A.

Manometric method for determining the gas exchange intensity in aquatic animals. Zool. zhur. 44 no.2:169-177 '65.

(MIRA 18:5)

1. Kaliningradskiy institut rybnoy promyshlennosti i khozyaystva, Institut morfologii zhivotnykh AN SSSR, Moskva i Institut biologii vnutrennikh vod AN SSSR, Bork Nekuczskogo rayona Yaroslavskoy oblasti.

GAYEVSKAYA, N.S.

Food relations of Homoptera (Insecta) to higher aquatic
plants. Biul.MOIP.Otd.biol. 70 no.5:30-35 S-0 '65.

(MIRA 18:12)

GAYEVSKAYA, O V

3(7)

PHASE I BOOK EXPLOITATION

SOV/3029

Moscow. Tsentral'nyy institut prognozov

Voprosy sinopticheskoy meteorologii (Problems in Synoptic Meteorology) Moscow, Gidrometeoizdat (otd.) 1959. 62 p. (Series: Its: Trudy, vyp. 79) 1,100 copies printed.

Sponsoring Agency: USSR. Glavnoye upravleniye gidrometeorologicheskoy sluzhby.

Ed. (title page): B. D. Uspenskiy; Ed. (inside book): L. B. Blinnikov;
Tech. Ed.: T. Ye. Zemtsova.

PURPOSE: This issue of the Institute's Transactions is intended for specialists in meteorology.

COVERAGE: This collection of articles discusses problems in synoptic meteorology. The first two articles deal with the formation and structure of frontal clouds in the Western Siberia and Ural Mountain area. Other articles discuss upper-level cyclonic and anticyclonic phenomena, the evolution of thermal fields, and thermal convection. References accompany each article.

Card 1/2

Problems in Synoptic Meteorology

SOV/3029

TABLE OF CONTENTS:

Sovetova, V. D. Microstructure of Frontal Clouds Over Western Siberia	3
Sovetova, V. D. Effect of the Ural Mountain Range on the Evolution of Frontal Cloudiness	12
<u>Gayevskaya, O. V.</u> The Problem of Accounting for Acceleration in Diagnosing and Forecasting the Evolution of Upper-Level Cyclones and Anticyclones	25
Burtsev, A. I., and T. P. Popova. The Role of Orderly Vertical Movements and Advection in the Evolution of the Thermal Field in Frontal Zones	33
Pavlovskaya, A. A. Aerological Characteristics of Thermal Convection of Varying Intensity	44

AVAILABLE: Library of Congress

Card 2/2

TM/mal
12-29-59

GAYEVSKAYA, O.V.

Horizontal divergence of winds and its role in the intensity changes
of low-level cyclones and anticyclones. Trudy TSIP no. 110:70-76 '61.
(MIRA 14:6)

(Cyclones)

L 13949-65 EWT(m)/T/EWA(m)-2 ASD(p)-3/AFWL/ESD(t)/SSD
ACCESSION NR: AP4047882 S/0056/64/047/004/1178/1184

AUTHORS: Gayevski, V.; Gorichev, P. A.; Perfilov, N. A.

TITLE: Formation of Li-8 fragments in the interaction¹⁹ between 9-GeV^B protons and lead nuclei

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47, no. 4, 1964, 1178-1184

TOPIC TAGS: lead, lithium, fission fragment, proton nucleus interaction, nuclear emulsion

ABSTRACT: The sandwich method (emulsion stock with interleaved metal foils) is used to investigate the production probability, energy spectrum, and angular distribution of Li⁸ fragments produced in the disintegration of lead nuclei by 9-GeV protons. The need for this investigation was brought about by some contradictions in the results of the emulsion method, which does not permit observation

Card 1/3

L 13949-65

ACCESSION NR: AP4047882

of the disintegration of a single type of nucleus. The emulsion stock was irradiated in the internal beam of the OIYaI synchrotron, which was parallel to the plane of the emulsion. The NIKFI-K emulsion dimensions were $10 \times 10 \times 0.04$ cm, with the foil thickness being 18 microns. The proton flux in the emulsion was $8 \times 10^6 \text{ cm}^{-2}$. The stars containing the Li^8 fragments were detected by area scanning from the side of the emulsion in contact with the foil. The geometrical corrections of the test results are briefly explained. Comparison of the experimental data with the predictions of the evaporation theory show that best agreement is obtained with a temperature $T = 14.9$ MeV and a Coulomb barrier height 9.6 MeV. It is concluded that an attempt to explain the energy and angular distributions of the Li^8 fragments with the aid of the evaporation theory leads to one of two conclusions: 1) the evaporation theory is correct but must be refined (primarily with respect to the dependence of the nuclear temperature and the magnitude of the Coulomb barrier on the excitation energy); 2) evaporation theory cannot be used to describe

Card 2/3

L 13949-65

ACCESSION NR: AP4047882

5

the formation of most Li^8 fragments. "The authors thank the directors of the high energy laboratory of OIYAI for affording the opportunity to irradiate the emulsion chambers in the synchrotron, and to the emulsion processing group of the high energy laboratory led by S. I. Lyubomilov and V. I. Baranov for processing the emulsions. The author is particularly grateful to S. I. Lyubomilov for help and direct participation in the emulsion chamber irradiation. Valuable discussions were held with our co-workers at the Radium Institute O. V. Lozhkin and I. I. P'yanov." Orig. art. has: 5 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 26Mar64

ENCL: 00

SUB CODE: NP

NR REF SOV: 002

OTHER: 010

Card 3/3

ALEKSEYEVA, M.V., doktor sel'khoz. nauk, prof, retsenzent; FROTOVA,
O.A., kand. sel'khoz. nauk, retsenzent; SHEV'YEV, Ye.I., agro-
nom, retsenzent; LEZHANSKINA, Z.S., kand. sel'khoz. nauk, red.;
VISHNYAKOVA, Ye., red.; GAYEVSKIY, A., red.; POKHLEBKINA, M.,
tekhn. red.

[Cooperation of science and production; experience in joint
work of the vegetable growers on the M.Gorkii State Farm and the
scientists of the Research Institute of Vegetable Gardening] So-
druzhestvo nauki i proizvodstva; opyt sovместnoi raboty ovo-
shchevodov sovkhosa im. M.Gor'kogo i uchenykh Nauchno-issledova-
tel'skogo instituta ovoshchnogo khoziaistva. Moskva, Mosk. ra-
bochi, 1963. 133 p. (MIRA 16:6)
(Vegetable gardening)

GAYEVSKIY, A. F.

Cand Tech Sci - (diss) "Development of manufacturing technology of polyesterurethane dyeing cylinders." L'vov, 1961. 15 pp; (Ministry of Culture Ukrainian SSR, Ukrainian Scientific Research Institute of the Printing Industry); 150 copies; price not given; (KL, 5-61 sup, 188)

GORDINSKIY, B.Yu., kand. khim. nauk; GAYEVSKIY, A.F., kand. tekhn. nauk;
SHIMANSKIY, V.M., kand. tekhn. nauk; SHKOL'NIK, S.I., inzh.

Packing gland for reactors operating in a vacuum. Khim. 1
neft. mashinostr. no.3:35 S '64. (MIRA 17:12)

GORDENSKIY, B.Yu.; SHIMANSKIY, V.M.; GAYEVSKIY, A.F.; SHAOL'NIK, S.I.

Reclaiming of polyester urethanes. Plast. massy. no.9:65-66 '65.
(MIRA 18:9)

L 15338-66 EWT(m)/EWP(j) RM

ACC NR: AP6000980

(A)

SOURCE CODE: UR/0286/65/000/022/0058/0059

AUTHORS: Shimanskiy, V. M.; Gayevskiy, A. F.; Shkol'nik, S. I.; Gordinskiy, B. Yu.

24/3

ORG: none

TITLE: A method for obtaining polyethylene glycoladipinate. Class 39, No. 176403¹⁵

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 58-59

TOPIC TAGS: polymer, polymerization, polycondensation, ethylene glycol, adipic acid, polyester

ABSTRACT: This Author Certificate presents a method for obtaining polyethylene glycoladipinate by polycondensation of adipic acid with ethylene glycol. To increase the rate of reaction, a cyclic diester of adipic acid and diethylene glycol is added to the initial reaction mixture.

SUB CODE: 11/07/ SUBM DATE: 14May62

OC

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UDC: 678.674:547.461.6:66.062.722.8

GAYEVSKIY, B. [Haisvs'kyi, B.], kand.tekhn.nauk; CHEREDNICHENKO, L.,
kand.tekhn.nauk

Increased efficiency of filter presses in the ceramic and kaolin
industry. Bud.mat.i konstr. no.5:53-56 S-0 '62. (MIRA 15:11)
(Filter presses) (Ceramic industries--Equipment and supplies)

GAYVSKIY, Boris Antonovich; LATSIYEV, R.Ya., kandidat tekhnicheskikh nauk, redaktor; LEUTA, V.I., inzhener, redaktor; UL'BERG, R.F., inzhener, retsenzent; RUDNISKIY, Ya.V., tekhnicheskiy redaktor

[Machine and equipment of the paper industry] Mashiny i apparaty bumazhnoi promyshlennosti. Kiev, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1955. 287 p. (MIRA 9:3)
(Papermaking machinery)

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 113 (USSR) SOV/124-57-5-5822

AUTHOR: Gayevskiy, B. A.

TITLE: Experimental Determination of the Specific Resistance to Filtration of Suspensions of Fibrous Materials (Eksperimental'noye opredeleniye konstant fil'tratsii voloknistykh suspenziy)

PERIODICAL: Izv. Kiyevsk. politekhn. in-ta, 1956, Vol 17, pp 154-161

ABSTRACT: The author investigated the influence exerted by the size or relative smallness of the individual suspended fibers of ground-up sulfite and sulfate pulps on the specific resistance to filtration exhibited by precipitates of these pulps settling upon a standard wire-screen laboratory filter. The precipitates' specific resistance to filtration was calculated from the experimental data according to the filtration equation

$$\tau = b(V^2 + 2V_0 V) \quad (b = \frac{\mu C r}{2 p F^2})$$

wherein: V is the running volume of the filtrate (in liters); V₀ is the volume of filtrate depositing a precipitate possessed of a resistance

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Experimental Determination of the Specific Resistance to Filtration of (cont.)

to filtration equal to the resistance offered by the cloth of the filter membrane; τ is the total time required for completion of filtration (in minutes); μ is the viscosity coefficient of the liquid medium (in $\text{kg} \cdot \text{min}/\text{dm}^2$); C is the weight of the solid phase per liter of liquid medium (in kilograms); r is the specific resistance to filtration of the precipitate (in dm/kg); p is the filtration pressure (in kg/dm^2); F is the area of the filtering surface (in dm^2). The precipitates' specific resistance to filtration r was found to be:

a) in the case of sulfite pulp:

b) in the case of sulfate pulp

$$r = \left(\frac{I^0}{10}\right)^{2 + \frac{p}{27}} \cdot 10^{10} \text{ [dm/kg]}$$

$$r = \left(\frac{I^0}{16}\right)^{3.1 + \frac{p}{20}} \cdot 10^{10} \text{ [dm/kg]}$$

wherein I^0 is the degree of beating of the pulp fibers expressed in Schopper-Riegler degrees ("freeness").

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V. A. Klyachko

GAYEVSKIY, B.A., dotsent.

~~CONFIDENTIAL~~
Modern paper and cardboard machines; from pages of foreign
journals. Bus.prom.31 no.2:27-29 P '56. (MLRA 9:6)
(United States--Paper making machinery)

GAYEVSKIY, B.A., dots.

Application of the filtration theory in the woodpulp and paper
industry. Izv. KPI 20:194-199 '57. (MIRA 11:3)
(Paper) (Woodpulp) (filters and filtration)

GAYEVSKIY, B.A.
LEVINSKIY, I.V., kand.tekhn.nauk, dots.; GAYEVSKIY, B.A., kand.tekhn. nauk,
dots.

Power drive for paper-making machinery. Izv. KPI 20:278-307 '57.
(Paper-making machinery) (MIRA 11:3)

CHERNOBYL'SKIY, Iosif Il'ich, prof., doktor tekhn.nauk; BONDAR', Alla Grigor'yevna, dotsent, kand.tekhn.nauk; GAYEVSKIY, Boris Antonovich, dotsent, kand.tekhn.nauk; GORODINSKAYA, Sarra Abramovna, dotsent, kand.tekhn.nauk; LADIYEV, Rostislav Yakovlevich, kand.tekhn.nauk; TANANAYKO, Yuriy Martir'yevich, kand.tekhn.nauk; MIRGORODSKIY, Vasily Timofeyevich, inzh.; STABNIKOV, V.N., prof., doktor tekhn.nauk, retsenzent; FURER, P.Ya., red.

[Machinery and equipment of chemical industries; principles of theory and design] Mashiny i apparaty khimicheskikh proizvodstv; osnovy teorii i rascheta. Pod red. I.I.Chernobyl'skogo. Moskva, Gos.nauchno-tekhn.isd-vo mashinostroit.lit-ry, 1959. 462 p.

(MIRA 13:2)

(Chemical industries--Equipment and supplies)

S/196/61/000/012/006/029
E194/E155

AUTHOR: Gayevskiy, B.A.

TITLE: Determination of the minimum dimensions of solid particles precipitated from suspension by hydro-cyclones

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika, no.12, 1961, 8-9, abstract 12G 52. (Izv. Kiyevsk. politekhn. in-ta, v.30, 1960, 179-187)

TEXT: Hydro-cyclones are used to concentrate, separate and purify suspensions and fluids; in them the suspension is delivered tangentially and follows a helical path (see sketch). A procedure is described to determine the smallest size of solid particles which are precipitated in a hydro-cyclone. The calculation is based on the equation of Professor Lyashchenko which has been modified to meet the case of combined action on the particles of gravity and centrifugal force, and also for the condition that the total acceleration can be assumed approximately equal to the centripetal acceleration v_t^2/r .

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The equation becomes of the following form:

$$\psi(\text{Re})^2 = \left[\frac{\pi d^3}{6\mu_2\psi} (\rho_1 - \rho_2) \rho_2 r_{\text{tcp}} v_{\text{tcp}}^2 \right] r^{-2} = A... \quad (a) \quad \checkmark$$

Lyashchenko's graph of the relationship between $\psi(\text{Re})^2$ and Re is used to determine the value of Re from which the time of radial mixing (or precipitation) of a heavy solid particle may be found.

$$\tau = \Delta r \frac{d}{v} \sum_1^n \frac{1}{\text{Re}} \text{ sec}, \dots \quad (b)$$

where:

$$\Delta r = \frac{r_2 - r_1}{n} \quad (c)$$

In formulae (a), (b) and (c): ψ - a resistance factor; d - the diameter of the solid suspended particle, cm; μ_2 - the viscosity of the liquid phase of the suspension, poise; φ - a form factor; ρ_1 and ρ_2 - the density of solid particles removed
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from the liquid and of the liquid itself respectively, g/cm³,
 ω - the radial speed (of precipitation) of solid particles, cm/sec,
 ν - the kinematic viscosity, cm²/sec, n - the number of points
of sections between radii r_1 and r_2 . To calculate the
minimum diameter of particles precipitated in the hydro-cyclone,
first determine the mean speed of the liquid in a helical path

$$v_{tcp} = \sqrt{\frac{2g(p_1 - p_2)}{1 - \xi}}$$

where p_1 and p_2 are respectively the excess head of suspension
at inlet to and outlet from the hydro-cyclone, mm of water, ξ - a
resistance factor. It may be assumed that:

$$v_{tcp} = 0.7v_{BX} \quad (e)$$

where v_{BX} is the speed of suspension at inlet to the hydro-
cyclone. Then determine the value of A corresponding to each
value of the radius r, the value $\psi(Re)^2 = Ar^{-2}$

and from this the value of Re and $1/Re$. Substitute the sum

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of the values of $1/Re$ in eq. (b) to obtain the time of precipitation of solid particles. The calculated throughput of the hydro-cyclone

$$Q_p = \frac{v}{\tau} \text{ m}^3/\text{sec},$$



where v is the volume of the working part of the hydro-cyclone. To determine d for a given throughput $Q_3 \text{ m}^3/\text{sec}$, the rate of flow along a helical path is determined from eqs. (b) or (a). Given various values of particle diameter, d_1, d_2, \dots, d_n attempt to obtain a value of Q_3 which coincides with Q_p , which is the required solution to the problem of determining the minimum diameter of solid particles precipitated in the hydro-cyclone. The method is illustrated by a numerical worked example
5 literature references.

[Abstractor's note: Complete translation.]

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