[illegible] Djordje; SALATIC, Branko.

Spontaneous external biliary fistula in the region of the [illegible]rib. Srpski arh. celok. lek. 92 no.6:673-676 Je '64

1. Hirurško odeljenje (pste bolnice u Sremskoy Mitrovici (Šef: prim. dr. Đorđe Janjatić).

SALATICH, A. K.

SALATICH, A. K. - Kand. biolog, nauk. A. L. Lypai arkh. Institut gradostroitel'stva Akademii arkhitektury USSR i LYPA, A. L. - Kand. Biolog. nauk i KOSAREVSKIY, I. A. - Kand. Arkh.

Elementy vneshnego blagoustroystva nacelennykh mest (Al'bom parternoy zeleni)
Page 80

SO: Collection of Annotations of Scientific Research Work on Construction, completed in 1950.
Moscow, 1951

SALATICH, A.K.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
LYPA, A.L. KOSAREVSKIY, I.A SALATICH, A.K.	"Planting of Trees in Inhabited Localities"	Kiev State University imeni T.G. Shevchenko

SO: W-30604, 7 July 1954

SALATICH, A. K.

SALATICH, A. K.--"Architectural-Planning Organization of Green Plantings on City Streets." (Dissertation for Degrees in Science and Engineering* Defended by USSR Educational Institutions) Acad Architecture Ukrainian SSR, Inst of City Construction, Kiev, 1955. * Architectural Sciences

SO: Knizhnaya Letopis' No. 37, 10 September 1956.

SALATICH, Andrey Karlovich, kand.arkhitektury; KVITNITSKAYA, I., red.; ZELENKOVA, Ye., tekhn.red.

[Landscaping for city streets] Ozelenenie gorodskikh ulits. Kiev, Gos.izd-vo lit-ry po stroit.i arkhit.USSR, 1957. 139 p. (MIRA 11:1)

(Streets) (Landscape gardening)

LESKOVICH, I.A.; YEGOROV, B.N.; SALATIN, V.P.

Flow stress and dilatometry of potassium nitrate. Zhur. fiz. khim. 36 no.3:521-525 Mr '62. (MIRA 17:8)

1. Institut obshchey i neorganicheskoy khimii imeni Kurnakova AN SSSR.

S/078/63/008/002/005/012
B101/B186

AUTHORS: Leskovich, I. A., Salatin, V. P.

TITLE: Phase diagram and outflow pressure of potassium nitrate

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 8, no. 2, 1963, 376 - 378

TEXT: The plotting of compression and expansion curves during compression by means of a mechanical Gagarin press is described. In a cylindrical press-mold a pressure of $15 \cdot 10^3$ kg/cm^2 is applied to the substance, compressing it to maximum density. Then the pressure is removed, the opening of the mold is covered with a lubricant and the sample is tossed several times inside the mold to reduce friction and the sample is again subjected to pressure, the compressions and expansions being recorded. With substances that undergo polymorphic transformations due to the pressure, hysteresis loops occur as a result of the change in specific volume. The process allows a simplified investigation of the p versus T phase diagrams of crystalline polymorphic substances. The p versus T diagram for KNO_3 was plotted and found to coincide with the data by P. W. Bridgman (Proc. Acad. arts and Sciences, 51, 599 (1916)). The

Card 1/2

line of the II⇄IV phase equilibrium was determined down to -40°C. There are 2 figures. The most important English-language reference is: I. W. Stewart, J. Chem. Phys., 36, 400 (1962).

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov of the Academy of Sciences USSR)

SUBMITTED: June 12, 1961

SALATINYAN, I.Z.; FOKEYEV, V.M.

Rate of paraffin deposition in pipes. Izv. vys. ucheb. zav.; neft' i gaz 4 no.9:53-59 '61. (MIRA 14:12)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika I.M. Gubkina.
(Paraffins)

SALATINYAN, I.Z.; FOKEYEV, V.M.; TREBIN, G.F.

Effect of pressure decline and free gas separation on the rate of wax precipitation in pipes. Nauch.-tekh. sbor. po dob. nefti no.15:91-94 '61. (MIRA 15:9)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.
(Petroleum pipelines) (Paraffin wax)

SALATINYAN, I.Z.; FOKEYEV, V.M.

Controlling the deposition of solid matter in petroleum production. Nauch.-tekh. sbor. po dob. nefti no.16:88-93 '62. (MIRA 15:9)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.
(Paraffin wax)

SALATINYAN, I.Z.; SHUBAYEV, A.M.; BASHKIRTSEV, M.I.

Separating beds with high temperatures. Nefteprom. delo no.4: 18-20 '64. (MIRA 17:6)

1. Stavropol'skiy filial Vsesoyuznogo neftegazovogo nauchno-issledovatel'skogo instituta.

SALATINYAN, I.Z.; SHUBAYEV, A.M.; BASHKIRTSEV, M.I.

New reservoir disconnectors. Izv.vys.ucheb.zav.;neft' i gaz 7 no. 1:113 '64. (MIRA 17:7)

1. Pyatigorskiy filial Groznenskogo neftyanogo nauchno-issledovatel'skogo instituta.

SHUBAYEV, A.M.; SALATINYAN, I.Z.; SAL'TARSKIY, Yu.V.

Causes of breakage in the lift tubing in flowing wells on the fields of the Stavropol Territory. Neftepromm. delo no.2:20-23 '65. (MIRA 18:5)

1. Stavropol'skiy filial Groznenskogo neftyanogo nauchno-issledovatel'skogo instituta.

BASHKIRTSEV, M.I.; SALATINYAN, I.Z.

Experimental simultaneous separate exploitation of two high-temperature oil beds in one well. Neftepром. delo no.6:11-14 '65. (MIRA 18:10)

1. Stavropol'skiy filial Groznenskogo neftyanogo nauchno-issledovatel'skogo instituta.

SALATNIKOV, N.N.

IZMAYLOV, N.A.; VAYZ', Ye.I.; SALATNIKOV, N.N.

Association of ions in nonaqueous solutions. Uch.zap. KHGU 71:29-32 '56. (MLRA 10:8)

(Ions)

USSR/Forestry - General Problems. K.

Abs Jour : Ref Zhur - Biol., No 15, 1958, 67983

Author : Salatova, N.G.

Inst : Western Siberian Branch of the Academy of Sciences USSR

Title : Forest Resources of Western Siberia and Krasnoyarskiy Kray and Their Utilization.

Orig Pub : Tr. po lesn. kh-vu Zap. Sibiri. Zap.-Sib. fil. AN SSSR, 1957, No 3, 41-48.

Abstract : No abstract.

Card 1/1

[illegible], I.A.; SHATOVA, N.G.; KHRAMOVA, N.F.

Reviews and bibliography. Izv. SO AN SSSR no.12: Ser. biol.-med. nauk no.3:157-161 '64. (MIRA 18:6)

SALATOVA, N.G.

Fourth All-Union Conference on the Protection of Nature.
Izv. Sib. otd. AN SSSR no.11:151-152 '61. (MIRA 15:1)
(Natural resources--Congresses)

BRESLAV, I.S.; ZHIRONKIN, A.G.; IL'NITSKIY, A.M.; KONZA, E.A.; MITYUSHOV, M.I.; NOZDRACHEV, A.D.; SALATSINSKAYA, Ye.N.; TROSHIKHIN, G.V.; SHMELEVA, A.M.

Some data on the effect of a closed space on the physiological functions in animals. Probl.kosm.biol. 2:291-302 '62. (MIRA 16:4)

(SPACE MEDICINE)

SALATSINSKAYA, Ye.N.

Effect of acclimatization on the resistance of mountaineers to hypoxia. Opyt izuch. reg. fiziol. funk. 6:69-72 '63
(MIRA 17:3)

1. Laboratoriya dykhaniya (zav. - doktor med. nauk A.G.Zhironkin) Instituta fiziologii imeni Pavlova AN SSSR.

L 12951-63 EWT(l)/BDS/ES(a)/ES(b)/ES(c)/ES(k) Pb-4 A/DD 63
62

ACCESSION NR: AP3001505 S/0239/63/049/005/0643/0647

AUTHOR: Breslav, I. S.; Zhironkin, A. G.; Konza, E. A.; Salatsinskaya, Ye. N.; Troshikin, G. V.

TITLE: Gas exchange dynamics of white mice under conditions of high partial oxygen pressure 7

SOURCE: Fiziologicheskiy zhurnal SSSR, v. 49, no. 5, 1963, 643-647

TOPIC TAGS: gas exchange, hyperoxia, hypooxia, redox, oxygen

ABSTRACT: Gas exchange dynamics in relation to an organism under hyperoxic conditions is of medical and biological importance but has received little attention. To study this problem experiments were conducted on white mice placed in a glass chamber with an automatic feeder. The chamber was kept under water to maintain a constant temperature (22-23°) and oxygen was supplied automatically. Total amount of carbon dioxide exhaled was determined by titrating the chemical absorber after the experiment. The mice were kept in nitrogen-oxygen mixtures with 60% or 90% oxygen (O sub 2) content for various periods of time. Some mice were taken from a regular air medium to a hyperoxic medium (60% or 90%) and some from a hyperoxic one to a

Card 1/2

L 12951-63

ACCESSION NR: AP3001505

hypooxic one (9% O sub 2). The gas exchange level of mice in a nitrogen-oxygen mixture at first is high and then drops to a level a little higher than normal and remains there. The gas exchange level of mice exposed to hyperoxic conditions for 36 hrs and then moved to a hypooxic medium undergoes a slow decrease. The dynamics of these changes reflect a rearrangement of the redox processes which appears to correspond with sudden changes in the oxygen medium. The author recommends that more detailed studies be made of oxygen concentrations and their effect on the gas exchange level in an organism. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Institut fiziologii im. I. P. Pavlova AN SSSR, Leningrad (Institute of Physiology, AN SSSR)

SUBMITTED: 15Aug62 DATE ACQ: 12Jun63 ENCL: 00

SUB CODE: AM NO REF SOV: 011 OTHER: 003

Card 2/2

SALATSINSKAYA, Ye.N.

Effect of acclimatization under the conditions of high altitudes on the human resistance to hypoxia. Probl. kosm. biol. 4:80-86 '65. (MIRA 18:9)

ZHIRONKIN, A.G.; BRESLAV, I.S.; KONZA, E.A.; NOZDRACHEV, A.D.; SALATSINSKAYA, Ye.N.; TROSHIKHIN, G.V.; FEDOROVA, L.D.; SHMELEVA, A.M.

Effect of prolonged sojourn of animals in oxygen-enriched air on some physiological functions. Probl. kosm. biol. 4:518-530 '65. (MIRA 18:9)

L 14265-66 EWT(1)/FS(v)-3 SCTB DD/RD
ACC NR: AT6003843 SOURCE CODE: UR/2865/65/004/000/0080/0086

AUTHOR: Salatsinskaya, Ye. N.

37
B+1

ORG: none

3,44

TITLE: Effect of acclimatization to high mountain conditions on human resistance to hypoxia

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk, Problemy kosmicheskoy biologii, v. 4, 1965, 80-86

TOPIC TAGS: high altitude physiology, hypoxia, human physiology, man, respiratory system, blood, oxygen

ABSTRACT: Experiments were performed with 38 mountain climbers, 21 of whom had been acclimatized to high altitude (1650 m), and 17 of whom had not been acclimatized at the beginning of the experiment. The purpose of the experiment was to detect differences between the two groups in their abilities to perform physical work at high altitudes, to withstand hypoxia, and to tolerate fatigue during ascents. Both groups remained at the mountain camp, at a 1650 m altitude, where they underwent training, participated in hikes

Card 1/4

2

and ascents, some of which reached altitudes of 4100 m above sea level. After 20 days the second group had achieved a degree of acclimatization comparable to that which the first group had at the beginning of the 20-day period. Members of both groups were tested at the beginning of their stay in camp, before and after each ascent, and at the end of their stay in camp.

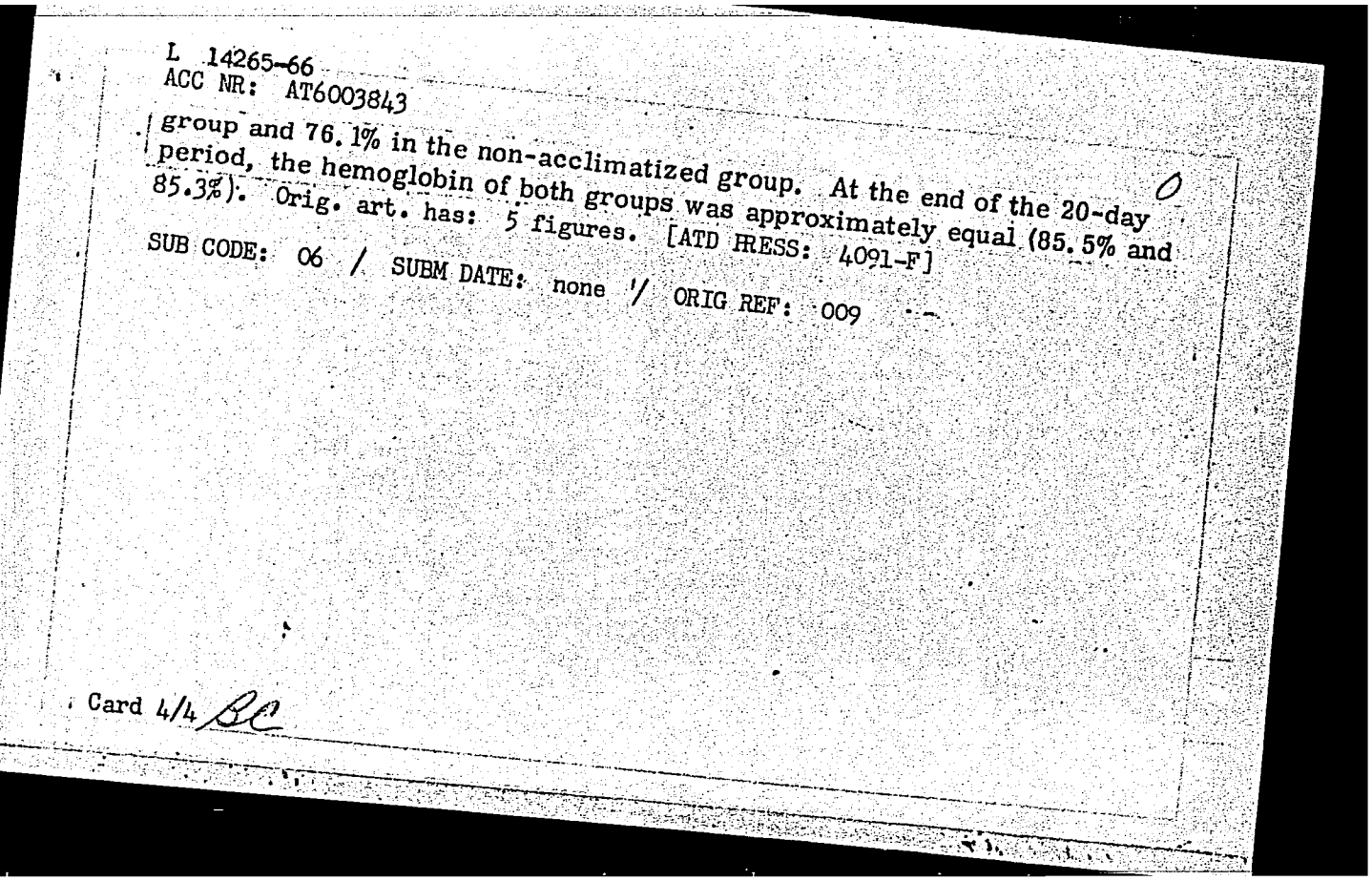
Actual tests for determining resistance to hypoxia were based on duration of respiration in a Krogh apparatus filled with air. As the oxygen was used up, the oxygen content of the air fell, while CO_2 was chemically absorbed. During this process, respiratory amplitude and frequency were recorded on a kymograph, oxygen content of the blood was recorded on an oxyhemograph, and observations were conducted on the quality of handwriting. Individual experiments were stopped upon appearance of acute cyanosis, tremor, or a distinct change in handwriting.

The acclimatized group showed a slight, but not statistically significant, rise in tolerance to hypoxia. The nonacclimatized group showed a statistically significant (12.3%) drop in tolerance to hypoxia. Toward the end of the 20-day period in camp, the acclimatized group showed a rise of 19.9%, and the non-acclimatized group showed a 20.4% increase in toler-

ance to hypoxia. When tested for tolerance to hypoxia in the Krogh apparatus, both groups showed a rise in pulmonary ventilation up to the 7th minute. After the 7th minute pulmonary ventilation continued to rise in the acclimatized group, but fell off in the non-acclimatized group. This drop in pulmonary ventilation in the non-acclimatized group is apparently due to acute fatigue of respiratory muscles.

Oxyhemograph tests of oxygen saturation of the blood showed that before ascents the degree of saturation was less in acclimatized subjects than in non-acclimatized ones. During ascents, however, the degree of saturation in both groups dropped equally. After hypoxia tests, the oxygen level in the blood in acclimatized subjects returned to initial levels more rapidly than in non-acclimatized subjects. After ascents the difference between the two groups in the rate of restoration of oxygen saturation to initial levels was even more marked.

During ascents the hemoglobin content of the blood of both groups dropped almost equally (7.6% in acclimatized subjects and 6.7% in non-acclimatized subjects). However, at the beginning of the 20-day period in camp, the hemoglobin content of the blood was 87.7% in the acclimatized



L 14265-66
ACC NR: AT6003843

group and 76.1% in the non-acclimatized group. At the end of the 20-day period, the hemoglobin of both groups was approximately equal (85.5% and 85.3%). Orig. art. has: 5 figures. [ATD PRESS: 4091-F]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 009

Card 4/4 BC

L 11784-66 EWT(l)/EWT(m)/FS(v)-3/EWP(t)/EWP(b) SCTB/IJP(c) DD/JD

ACC NR: AP6001112 SOURCE CODE: UR/0239/65/051/012/1501/1506

55 55 55 55

AUTHOR: Breslav, I. S.; Zhironkin, A. G.; Salatsinskaya, Ye. N.

51 B

CRG: Institute of Physiology im. I. P. Pavlova, AN SSSR, Leningrad (Institut fiziologii AN SSSR)

TITLE: Active selection of nitrogen-oxygen and helium-oxygen mixtures by animals and humans

21

SOURCE: Fiziologicheskiy zhurnal SSSR, v. 51, no. 12, 1965, 1501-1506

TOPIC TAGS: human physiology, animal physiology, gas mixture, oxygen, helium, respiratory system, helium oxygen atmosphere

ABSTRACT: The authors used a "gas ladder" devised by Breslav to determine the gas preference of white mice, under conditions which permitted these animals to make an active choice between respired helium-oxygen and nitrogen-oxygen mixtures. Normal and decreased (10—12.5%) levels of oxygen were supplied with each diluent. Human subjects were allowed to choose freely either of the two mixtures and to change from one to the other simply by turning a stopcock. The animals and humans usually chose the helium mixtures in preference to the nitrogen-oxygen mixtures with both the normal and low oxygen levels. When the same gas (nitrogen or helium) was the diluent, the mice and the humans preferred the normal oxygen mixture to the hypoxic. The auth-

Card 1/2 UDC: 612.18

L 11784-66

ACC NR: AP6001112

ors attribute the preference for helium to the low density of that gas which caused a decrease in resistance to flow of the mixture in the respiratory tract; this increased pulmonary ventilation without added exertion by the respiratory muscles. Orig. art. has: 3 figures, and 1 table. [14]

SUB CODE: 06/ SUBM DATE: 25Apr64/ ORIG REF: 007/ OTH REF: 008

ATD PRESS: 4180

HW

Card 2/2

L 16812-66 EWT(1) SCTB DD

ACC NR: AT6003887 SOURCE CODE: UR/2865/65/004/000/0518/0530

AUTHOR: Zhironkin, A. G.; Breslav, I. S.; Konza, E. A.; Nozdrachev, A. D.; Salatsinskaya, Ye. N.; Troshikhin, G. V.; Fedorova, L. D.; Shmeleva, A. M.

ORG: none

45
B+1

TITLE: Effects of prolonged exposure to oxygen-enriched air on some physiological functions in animals

2

SOURCE: AN SSSR. Otdeleniye biologicheskikh nauk. Problemy kosmicheskoy biologii, v. 4, 1965, 518-530

TOPIC TAGS: oxygen, hyperoxia, physiology, space medicine, closed ecology system

ABSTRACT: Experiments were performed on white mice kept 10 days in a closed system filled with air or a gaseous mixture containing 63% oxygen to determine the effects on some basic functions in relation to the length of exposure. The respiratory rate of the "oxygen" mice was noticeably slower than that of the control mice and their oxygen consumption was somewhat higher. Hyperoxia lowered thyroid function, changed hematological indices (decrease in hemoglobin concentration, number

2

Card 1/2

L 16812-66
ACC NR: AT6003887

of erythrocytes, reticulocytes, and lymphocytes), and adversely affected the central nervous system (impairment of reflexes and decrease in excitability of some nerve centers). The changes noted were sharper after the 6th day of the experiment than after the 10th day, an indication of temporary adaptation. The authors conclude that it is relatively safe to breathe gaseous mixtures containing 63% oxygen for a 10 day period. However, the changes appearing on and after the 10th day, especially in the lungs and blood, are the initial signs of the pathological action of oxygen. Orig. art. has: 7 figures.

SUB CODE: 06/ SUBM DATE: 00/ ORIG REF: 043/ OTH REF: 013

Card 2/2 not

L 11380-67 EWT(1) SCTB DD/GD SOURCE CODE: UR/0000/66/000/000/0073/0074
ACC NR: AT6036504

17

AUTHOR: Breslav, I. S.; Salatsinskaya, Ye. N.

ORG: none

TITLE: Effect of a helium atmosphere on the reaction of the organism to insufficient oxygen and excess carbon dioxide [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 73-74

TOPIC TAGS: hypoxia, hypercapnia, helium oxygen atmosphere, human physiology, hematology

ABSTRACT: The effect of helium atmospheres on reactions to lowered pO_2 and to elevated pCO_2 in the respired atmosphere was studied in young men and women. In addition to physiological indices (minute volume, blood oxygen tension, etc), this study used the gas preference method (active choice of the preferred respiratory mixture).

Helium mixtures having either a normal or a reduced oxygen content caused respiration to become more rapid and shallow; blood oxygen saturation in these mixtures differed little from that observed in nitrogen-oxygen mixtures.

Moderate hypoxia in a helium atmosphere (12% oxygen) produced a less dramatic increase in pulmonary ventilation than in a nitrogen atmosphere. It was more difficult to tell a hypoxic mixture from one with normal oxygen content in helium than in nitrogen.

Card 1/2

L 11300-67

ACC NR: AT6036504

Respiration of helium and nitrogen atmospheres with 9% oxygen produced identical values of all studied indices.

The majority of subjects preferred helium to nitrogen mixtures with identical oxygen contents, apparently because maintenance of the necessary alveolar ventilation is easier in the less dense helium atmosphere.

The ventilation reaction to CO_2 was more pronounced, the increase in blood oxygen saturation was smaller, and the negative preference reaction was clearer while breathing helium-oxygen mixtures than in the case of similar nitrogen mixtures.

Helium mixtures which were both hypoxic (12% O_2) and hypercapnic (1.0% to 2.5% CO_2) produced a more rapid increase in oxygenation and were much preferred by the subjects over similar nitrogen mixtures.

To summarize, when the CO_2 content is small and pO_2 is normal, nitrogen atmospheres seem best; when pO_2 is reduced, helium atmospheres are best. As pCO_2 increases, differences between helium and nitrogen mixtures decrease. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 2/2 egk

SALA'TSINSKIY, V.V.; DREGOLENKO, A.S.

Readers' response to N.A. Malevich's article "Cars for new and redesigned mines." Ugol' 33 no.4:39 Ap '58. (MIRA 11:4)

1. Toretskiy gosudarstvennyy mashinostroitel'nyy zavod.
(Mine railroads--cars)

SALATSINSKIY, V.V.; DREGOLENKO, A.S.

Automatic couplings for mine railroad cars. Vop. rud. transp. no.3:215-222 1959. (MIRA 14:4)

1. TGMZ.

(Mine railroads—Equipment and supplies)

SALATSINSKIY, V.V.

Machines and mechanisms for track transportation in coal mines. Ugol' Ukr. 3 no.7:35-37 Jl '59. (MIRA 12:11)

1.Toretskiy mashinostroitel'nyy zavod.
(Mine railroads)

ALTUKHOV, V.I.; PANASENKO, S.I.; SALATSINSKIY, V.V.

Analyzing the design of props with constant resistance.
Ugol' Ukr. 6 no.1:13-15 Ja '62. (MIRA 15:2)
(Mine timbering)

VRUBLEVSKIY, V.I., inzh.; KRYZHANOVSKIY, O.M., inzh.; PANASYUK, L.S., inzh.; RAVICH, K.S., inzh.; SHCHUR, A.G., inzh.; GARNAZHENKO, I.O., inzh.; LEBEDEV, Ye.I., inzh.; PSAREV, A.M., inzh.; SALATSINSKIY, V.V., inzh.; SHOKAREV, V.A., inzh.

Over-all mechanization and automation of the compsition of charge. Mashinostroenie no.6:45-47 N-D '62. (MIRA 16:2)

1. Institut liteynogo proizvodstva, AN UkrSSR (for Vrublevskiy, Kryzhanovskiy, Panasyuk, Ravich, Shchur). 2. Toretskiy mashinostroitel'nyy zavod (for Garnazhenko, Lebedev, Psarev, Salatsinskiy, Shokarev).
(Cast iron--Metallurgy) (Automation)

KUZNETSOV, K.K.; BURSHTEYN, M.A.; PEYSAKHOVICH, G.Ya.; BAZER, E.Ya.; SALATSINSKIY, V.V.; DREGOLENKO, A.S.; RASSOLOV, I.A.

Hopper train with bottom unloading. Gor. zhur. no.4:75 Ap '65. (MIRA 18:5)

L 04509-67 EWT(m)/EWP(t) IJP(c)

ACC NR: AP6035631 SOURCE CODE: UR/0089/66/020/005/0392/0396

AUTHOR: Lebedev, V. N.; Zel'chinskiy, H.; Salatskaya

ORG: none

TITLE: Experimental determination of radiation quality factors in the vicinity of high-energy accelerators

SOURCE: Atomnaya energiya, v. 20, no. 5, 1966, 392-396

TOPIC TAGS: high energy accelerator, synchrocyclotron

ABSTRACT: The results of some measurements of the effective quality factors for pulsed molticomponent radiation in the vicinity of a 10-Bev synchrophasotron are presented. The quality factors obtained by a recombination method varied from 3 to 11. These values are compared with values from other high-energy accelerators. Some data on values measured during experiments with a 680-Mev synchrocyclotron are also given. Orig. art. has: 1 figure and 2 tables. [NA]

SUB CODE: 20 / SUBM DATE: 21 Oct 65 / ORIG REF: 011 / OTH REF: 014

Card 1/1 m_{js} UDC: 577.391

0922 0033

S/796/62/000/003/017/019

AUTHORS: Lebedev, V.N., Salatskaya, M.I.

TITLE: A scintillation counter for ultrahigh-speed nucleons.

SOURCE: Moscow. Inzhenernofizicheskiy institut. Pribory i metody analiza izlucheniy. no.3. 1962, 164-180.

TEXT: Many of the most highly sensitive and highly resolving detectors of ultrahigh-speed neutrons are made of scintillation plastics which register the neutrons by recoil protons. A shortcoming of such detectors is their sensitivity to γ-radiation, which renders them incapable of neutron and γ-component separation in the mixed radiation field of a synchrophasotron. The activation method may be usefully employed; for example, C^{12} will be transformed into radioactive C^{11} via the $C^{12}(n,2n)C^{11}$ reaction, if the impinging neutrons exceed a threshold energy level (E_{thr}=20.6 mev), whereas its sensitivity to γ-radiation is appreciably smaller (integral cross-section two orders of magnitude smaller than for neutron reaction). The relatively low sensitivity of the C detector has stimulated several attempts to to improve it (brief survey provided). The objective of the present project is the development of a more sensitive device which affords a higher effectiveness of C^{11}-decay-positron registration than those described in the literature. Description

Card 1/4

A scintillation counter for ultrahigh-speed nucleons. S/796/62/000/003/017/019

of counter: The activity sensor utilized utilized is one of various p-terphenyl-based liquid scintillators housed in a light-tight 1,000-mℓ metallic container. Liquid luminophores permit changing the scintillator without removing the photomultiplier (PhM) voltage or disturbing the optical contacts. The diam of the cavity is 110 mm, the inter-photocathode distance is 105 mm (cross-section shown). The PhM is ducted directly into the scintillator to avoid the (appx. 50%) losses usually associated with glass or plexiglas windows. Details of the container, including the light-retaining drainage and filling valves for the liquid scintillator and the external steel and Pb shield, are set forth, and the effectiveness of the shielding is illustrated by tabulated background data. A block diagram depicts the equipment for the registration of the C^{11}-decay-positron pulses. The light flashes within the scintillator are picked up by two coincident ФЭУ-29 (FEU-29) PhM's. The pulses are taken off the 1,000-ohm anode load and enter a cathode repeater matched to a coaxial cable whereby the pulses enter the counter. The counter circuitry, comprising the coincidence-separation block (resolution time 10^{-8} sec, sensitivity 0.2 v), the discriminator, the scaler, the logarithmic intensimeter, and the mean-counting-rate meter, is described and depicted. Maximum counting rate: 10^4 pulses/sec. Stable operation is achieved within 30 min. Maximum variations in counting effectiveness during continuous operation did not exceed ± 5%; the deviation of the effectiveness from the nominal value could at all times be verified by means of an auxiliary radioactive

Card 2/4

A scintillation counter for ultrahigh-speed nucleons. S/796/62/000/003/017/019

source with an accuracy of ± 5%. The recording equipment is described and depicted photographically. Experimental data: The counting effectiveness of p-terphenyl in toluene was determined on the neutron beam of the synchrocyclotron of the Laboratory of Nuclear Problems under simultaneous irradiation of C cylinders, the activation of which served as a measure of the neutron flux. An effectiveness of 51% was measured and verified to within ± 5% by means of a Co^{60} control source. The activation of the scintillator was determined either by the recorded decay curve of the C^{11} and by its extrapolation to the end of the irradiation, or by the integral count over some time t. The latter is analytically found to be more sensitive. The use of neutron fluxes near the sensitivity-threshold value of the counter is advisable. The automatic-recording method, for fluxes above 5 neutrons/$cm^2 \cdot$ sec is no less accurate than the integral-count method, but is incomparably more convenient. An optimal measurement time exists; beyond a limiting duration the rapid decay permits the background fluctuations to adduce a disturbingly large error contribution; an analytical expression is derived and graphed to determine the optimal measurement time in terms of the background intensity and the number of atoms decaying per unit time. The optimal time is found to decrease and the error to increase with increasing relative background intensity. The comparative evaluation of the effectiveness of several scintillators concludes with the selection of p-terphenyl in toluene, which is also little subject to aging under month-long

Card 3/4

A scintillation counter for ultrahigh-speed nucleons. S/796/62/000/003/017/019

counting with a Co^{60} control source. There are 10 figures, 3 tables, and 13 references (6 Russian-language Soviet and 7 English-language, of which one is cited in its Russian-language translation).

ASSOCIATION: None given.

Card 4/4

42552

S/089/62/013/005/004/012
B102/B104

27.4000
24.6730

AUTHORS: Zolin, L. S., Lebedev, V. N., Salatskaya, M. I.

TITLE: Use of nuclear emulsion of type A (K) for individual fast-neutron dosimetry

PERIODICAL: Atomnaya energiya, v. 13, no. 5, 1962, 467-471

TEXT: K-type nuclear emulsions 20μ thick on triacetate backing designed for recording protons of 0.3-150 Mev were used to check 0.15-15-Mev neutron doses. An individual method was devised using a system of 13 layers: cellulose cardboard (58), Al(83); triacetate film (34.4); Al (27.7); black cellulose paper (13.3); emulsion backing (17.2); emulsion (6.9); triacetate film (17.2); black cellulose paper (13.3); Al (27.7); triacetate film (34.4); Al (83), and cellulose cardboard (58). The data in the brackets are the layer thicknesses in mg/cm^2. On each side the emulsion is covered by 6 layers, arranged symmetrically, the arrangement being so chosen that the dependence of the number of tracks in the emulsion on the neutron energy is analogous to the dose absorbed in the biological tissue. This was checked by determining the contribution of

Card 1/3

Use of nuclear emulsion of type ...

each layer to the total number of tracks. A comparison of the dose curves as calculated shows that in the case of perpendicular irradiation, and for $E_n > 3$ Mev, the curve of the layer packet lies higher. The calculations were verified experimentally with monochromatic neutrons (2.5, 3.6, and 14 Mev). It was found that in the case of perpendicular neutron irradiation the number N of tracks per cm^2 of emulsion is equal to the calculated number within the error limit. In the case of parallel irradiation N is by 50% smaller than with perpendicular irradiation. If a rotating packet of layers is irradiated, then N is 25% smaller than with perpendicular irradiation; in this case $N(E_n)$ agrees with the dose curve of biological tissue to within $\pm$ 15%. The dose D(in rad) is calculated according to D=AN where $A=(1.11\pm0.08).10^{-5}$ rad/mrek.cm^{-2}. The photoemulsions were treated according to the NIKFI standards, the films were scanned with an MBI-3 (MBI-3) microscope (950x). The nuclear emulsion was rendered sensitive to thermal neutrons by the presence of nitrogen; $N^{14}(n,p)C^{14}$ has a σ=1.75 b which decreases as $E_n^{-1/2}$ with increasing E_n. At 200 kev σ=1.5 mb and E_p=0.56 Mev. Hence this method

Card 2/3

makes it possible to measure the total thermal and the fast neutron dose; a Cd-filter is used to separate the two components. The γ-background becomes important only at doses above 5 r. At high γ-intensity the emulsion types Д(D), Т-3 (T-3) or Я-2 (Ya-2) are used that are less sensitive to γ-radiation. The track regression was studied on K-type emulsions in a 70-day Po-Be-irradiation and it was found to lie within the error limits. It is the higher the less sensitive an emulsion to (recoil) protons. The K-type emulsion in the "correction packet" proves to be rather reliable (root-mean-square error in the determination of the monthly admissible dose +20%) and allows comparatively rapid scanning (85 films can be scanned by 1 person within 36 hrs). At present these packets are used for dosimetric monitoring of personnel in the Laboratoriya vysokikh energiy Ob"yedinennogo instituta yadernykh issledovaniy (High-energy Laboratory of the Joint Institute of Nuclear Research). There are 3 figures and 2 tables.

SUBMITTED: February 10, 1962

LEBEDEV, V.N.; MOROZOV, V.S.; MURIN, G.F.; NIKITIN, M.D.; SALATSKAYA, M.I.

Cosmic radiation doses in biocameras of the spaceships "Vostok-3" and "Vostok-4". Kosm. issl. 1 no.2:309-311 S-O '63.
(MIRA 17:4)

L 25384-65 EWG(j)/EWT(m)

ACCESSION NR: AP5002153 S/0120/64/000/006/0073/0076

AUTHOR: Zel'chinskiy, M.; Lebedev, V. N.; Salatskaya, M. I. B

TITLE: An instrument for measuring the recommended relative biological effectiveness of radiation 19 9

SOURCE: Pribory i tekhnika eksperimenta, no. 6, 1964, 73-76

TOPIC TAGS: relative biological effectiveness of radiation, RBE

ABSTRACT: A new instrument is described which is intended for measuring the relative biological effectiveness of radiation (RBE) as defined by the International Commission on Protection from Radioactive Radiations. Two tissue-equivalent ionization chambers are placed in the field being explored. One chamber receives a high voltage sufficient for its operation under saturation conditions. The high voltage for the other chamber is so selected that its ion collection is a linear function of RBE. A 3-stage electrometric amplifier is connected to each

Card 1/2

L 25384-65

ACCESSION NR: AP5002153

chamber. The output scale of the saturated-chamber electrometer is graduated in rads. RBE is a single-valued function of the ratio of currents of the two chambers. Hence, a simple discrete division circuit with 20 miniature relays and a pointer-type instrument is used for measuring RBE.

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

SUBMITTED: 21Nov63 ENCL: 00 SUB CODE: PH, NP

NO REF SOV: 001 OTHER: 004

Card 2/2

L 24700-66 EWT(m) IJP(c)
ACC NR: AP6014390 SOURCE CODE: UR/0391/66/000/004/0009/0014

AUTHOR: Lebedev, V. N. (Moscow); Gus'kova, A. K. (Moscow); Ponizovskaya, A. I. (Moscow); Denisova, Ye. A. (Moscow); Gribova, T. A. (Moscow); Salatskaya, M. I. (Moscow); L'vovskaya, E. N. (Moscow)

ORG: Joint Institute of Nuclear Research (Ob"yedinennyy institut yadernykh issledovaniy); Scientific Research Institute of Industrial Hygiene and Occupational Diseases AMN SSSR (Institut gigiyeny truda i profzabolevaniy AMN SSSR)

TITLE: Clinical and dosimetric data derived from observation of personnel operating a 10-Gev OIYAI synchrophasotron (Analysis of results of dosimetric monitoring from 1956—1962)

SOURCE: Gigiyena truda i professional'nyye zabolevaniya, no. 4, 1966, 9-14

TOPIC TAGS: radiation effect, industrial hygiene, medical examination, systole, diastole, bradycardia

ABSTRACT: Workers operating a 10-Gev synchrophasotron at the high-energy laboratory of the Joint Institute of Nuclear Research in the period of 1955—1962 were examined, and clinical test results were correlated with data derived from dosimetric monitoring. Levels of influence of x-rays, gamma radiation, beta radiation, and fast neutron radiation (the latter in the energy range of 0.5—200 Mev) were determined by various methods. Workers were divided into three groups according to the kind

Card 1/2 UDC: 613.648:621.384.611

L 24780-66

ACC NR: AP6014390

and level of radiation to which they had been habitually exposed. It was found that the first group, consisting of people directly involved in the operation and repair of the synchrophasotron, in servicing of linear accelerators, etc., received doses from 2—3 rem (the maximum permissible dose was set at 5 rem/yr). The second group, consisting of physicists and engineers conducting the experiments, together with technicians and mechanics, received about the same amounts of radiation. The third group, auxiliary personnel such as electricians and janitors exposed to radiation only occasionally, averaged less than 0.5 rem/yr. Two hundred and fifty-four workers (all groups) were given thorough physical examinations in the course of the 8-yr observation period. Eighty-five percent of the subjects were men, 95% were under 40, and 67% had periods of service from 4—10 yr. Two hundred and two control subjects were given the same tests. The following functional shifts, all within physiological norms, were noted in the experimental group: 1) Seventeen percent of the experimental group had a systolic pressure of 100 mm or lower, as compared with 5% of the controls, and 35% had a systolic pressure of 105 mm or lower, as against 21% of the controls. 2) Diastolic pressure was also decreased in the experimental group, but to a lesser extent. 3) Pulse pressure in the experimental group averaged 40.6 mm as against 44 mm in the controls. 4) In the experimental group, tonus of blood vessels in the lower extremities was somewhat decreased. 5) Bradycardia was noted in 45% of the experimental group as compared with 28% of the controls. It must be noted that these variations did not hinder work capacity or seriously detract from the overall health of the subjects investigated. Orig. art. has: 2 figures and 1 table. [JS]

SUB CODE: 06/ SUBM DATE: 15Dec64/ ORIG REF: 008/ ATD PRESS: 4250

Card 2/2

GOVOROV, A.M.; Li Ga Yen; OSETINSKIY, G.M.; SALATSKIY, V.I.; SIZOV, I.V.

Spectra of α-particles and differential cross sections of the reaction $H^3(t, 2n)He^4$ at an angle of 90 . Zhur.eksp.i teor. fiz. 41 no.3:703-707 S '61. (MIRA 14:10)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Alpha rays--Spectra) (Nuclear reactions)

KYUN, B.; SALATSKIY, V.I.; SIZOV, I.V.

[Study of the reaction C^{12} (t, p.) C^{14}.] Issledovanie reaktsii C^{12}(t, p) C^{14}. Dubna, Ob"edinennyi in-t iadernykh issl., 1961. 15 p. (MIRA 15:1)
(Nuclear reactions) (Carbon)

GOVOROV, A.M.; LI GA YEN; OSETINSKIY, G.M.; SALATSKIY, V.I.; SIZOV, I.V.

Total cross sections of the T -T reaction in the 60-1140 Kev. energy range [with summary in English]. Zhur. eksp. i teor. fiz. 42 no.2:383-385 F '62. (MIRA 15:2)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Nuclear reactions)

NEDVEDYUK, K.; SALATSKIY, V.I.; SIZOV, I.V.; FURMAN, V.I.; SARANTSEV, V.R., tekhn. red.

[Angular distributions of α-particles and total cross sections for the reaction $C^{12}(t, \alpha_0)B^{11}$] Uglovye raspredeleniia α - chastits i polnye secheniia reaktsii $C^{12}(t, \alpha_0)B^{11}$. Dubna, Ob"edinennyi in-t iadernykh issledovanii, 1962. 6 p. (MIRA 15:12)

(Alpha rays) (Nuclear reactions)

43365
S/056/62/043/005/016/058
B102/B104

AUTHORS: Kyun, B., Salatskiy, V. I., Sizov, I. V.

TITLE: Investigation of the $C^{12}(t,p)C^{14}$ reaction

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 5(11), 1962, 1660-1664

TEXT: The differential and total cross sections of the reaction $C^{12}(t,p)C^{14}$ and the proton angular distribution were measured in order to determine the reaction mechanism for E_t below the Coulomb barrier (cf. also Bull. Am. Phys. Soc. 4, 321, 1959; Proc. Phys. Soc. 76, 914, 1960; Phys. Rev. 125, 642, 1962). The target consisted of Al foil 3 mg/cm^2 thick on which a grapnite layer 76 µg/cm^2 thick was deposited by vacuum evaporation. It was bombarded under 45° by a triton beam with $0.32 \leq E_t \leq 1.18$ Mev obtained from an electrostatic accelerator. The proton angular distribution was measured with a vacuum chamber (Preprint OIYaI P-621, 1960) and an ФЭУ-31 (PEU-31) photomultiplier, revolving around the target. A second

Card 1/4

S/056/62/043/005/016/058
B102/B104

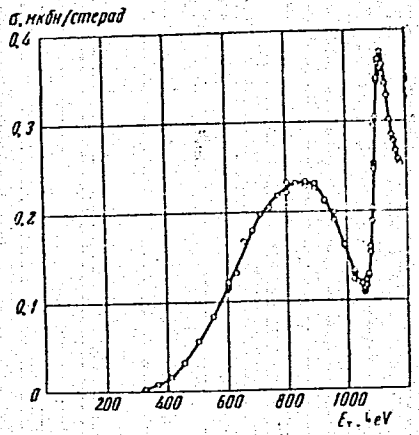
Investigation of the ...

scintillation counter with an ФЭУ-С (FEU-S) photomultiplier, arranged under an angle of 90° to the triton beam, served as a monitor. The pulses from the revoluting counter were fed to a multi-channel pulse-height analyzer. The angular distribution was determined between 0 and 155° with 10° intervals ; the angular resolution was ±3.5° and the statistical error was ±3%. The E_t-dependence of the proton yield at 90° (lab. system) was measured via $T^3(t,2n)He^4$ reaction. The absolute differential cross section σ at E_t=850 kev as measured with a methane-filled gas target gave a value of 233±5 μb/sterad. The curve $\sigma(E_t)$, obtained for 90° l. s., cf. Fig. 2, has maxima at 850 at 1117 kev, the second of which here observed for the first time, is attributed to a resonance with the 15.74-Mev level of the compound nucleus N^{15}. This was observed both for differential and for total cross section curves at 0, 40, 70, and 150°. The angular distributions $\sigma(\theta)$ in the c. m. s. depend, in their shape and position, greatly on E_t. A small-angle minimum, observed for E_t = 372 kev vanishes with increasing E_t, the maximum at

Card 2/4

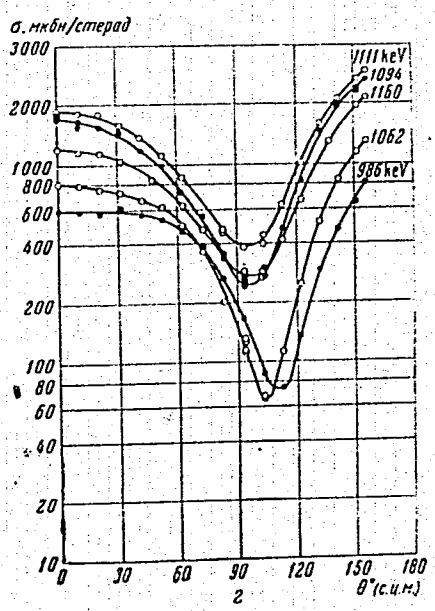
Investigation of the ...

Fig. 2



E_t, Mev	σ_{tot}, mb
0,372	0,10±0,01
0,500	0,59±0,02
0,595	1,02±0,03
0,616	1,45±0,04
0,673	2,00±0,05
0,698	2,22±0,06
0,753	2,66±0,07
0,818	2,84±0,07
0,868	3,28±0,09
0,924	3,74±0,10
0,987	4,73±0,12
1,062	5,89±0,17
1,094	12,15±0,36
1,111	14,14±0,37
1,160	9,88±0,28

Fig.3



Card 4/4

SALATSKIY, V. I.

2

TEPLOV, I. B., MAN'KO, V. I., and SALATSKIY V. I.

"Studies on the mechanism of nuclear reactions"

Report presented at the Conference on Nuclear Reactions produced by light nuclei, Dubna, December 1962.

L 10239-63 EWT(1)/EWT(m)/BDS/ES(s)-2--AFFTC/ASD/SSD--Pt-4--
IJP(C)
ACCESSION NR: AP3000033 S/0056/63/044/005/1450/1455

AUTHOR: Nedvedyuk, K.; Salatskiy, V. I.; Sizov, I. V.

TITLE: Investigation of the reactions C-12 (t, Alpha)B-11 19

SOURCE: Zhurnal eksper. i teoret. fiziki, v. 44, no. 5, 1963, 1450-1455

TOPIC TAGS: Carbon-tritium interactions, low energy, total cross sections, differential cross sections, angular distribution

ABSTRACT: The differential cross sections of the reactions C-12 (t, Alpha sub 0)B-11 and C-12 (t, Alpha sub 1)B-11* were investigated at a laboratory-system angle of 90° in the tritium-ion energy range 0,3 - 1.2 MeV. This is a continuation of a detailed investigation of the interaction between tritium nuclei and carbon at low bombarding-particle energies, aimed at obtaining data for the study of the mechanism of these reactions. The experiments were performed at energies lower than before, and yielded data on the differential and total cross sections of these reactions at energies below the Coulomb barrier of the C-12 nucleus for tritium. The angular distributions of the Alpha

Card 1/2

L 10239-63
ACCESSION NR: AP3000033

7

particles, corresponding to the formation of a residual B-11 nucleus in the ground state, were measured for several energies in the indicated range, and the total cross sections of this reaction were obtained. 'In conclusion, the authors thank F. L. Shapiro for useful advice in the discussion of the obtained results, G. N. Flerov and his co-workers for providing the semiconductor detectors, V. I. Furman, S. S. Parzhitskiy, A. P. Kobzev for participating in the experiments and the data processing, and also the crew of the electrostatic generator.' Orig. art. has: 4 figures.

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

SUBMITTED: 16Nov62 DATE ACQ: 12Jun63 ENCL: 00

SUB CODE: PH NR REF SOV: 003 OTHER: 002

bm/KeB
Card 2/2

SALATYAN, O.V.

Our efficiency promoters and inventors. Kons. i ov. prom. 13 no.11:4-7 N '58. (MIRA 11:11)

1. Zaveduyushchiy sektorom truda Odesskogo konservnogo kombinata.
(Odessa Province--Canning industry--Equipment and supplies)

L 9538-66 EWT(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b) MJW/JD

ACC NR: AP5026288 SOURCE CODE: UR/0125/65/000/010/0007/0011

AUTHOR: Russiyan, A. V. (Candidate of technical Sciences); Salautin, V. A. (Engineer); Pavperova, I. A. (Engineer); Gnuchev, S. M. (Candidate of technical sciences)

ORG: TsNIIChM

TITLE: Resistance of austenitic steel EI847 to the formation of hot cracks during welding as a function of melting technology

SOURCE: Avtomaticheskaya svarka, no. 10, 1965, 7-11

TOPIC TAGS: austenitic steel, hot crack, weld defect, metallurgic furnace, arc furnace, induction furnace, ferroalloy / EI847 (ØKh16N15M3B) austenitic steel

ABSTRACT: The purely austenitic EI847 (ØKh16N15M3B) steel is designed chiefly for tube production. Its yield point, tensile strength and other properties are sufficiently high at 20 and 600°C. Since, however, occasionally melts of this steel do not behave up to expectations, the authors experimentally investigated the effect of different conditions of its production on its resistance to the formation of hot cracks in the near-weld zone and in the weld metal. Some melts were obtained in a 20-ton arc furnace and others in a 50-kg induction furnace on either using fresh charge (carbon steel or armco iron plus alloy elements) with oxidation of slag or remelting the alloyed wastes with addition of oxygen. Alloying with either alloy metals (Cr metal, Nb metal, Mo metal) or ferroalloys (ferrochrome, ferroniobium, fer-

Card 1/2

UDC: 621.791.75:621.746.76

L 9538-66

ACC NR: AP5026288 O

romolybdenum) was employed. Specimens of these steels were subjected to torsional fracture tests at 1250°C, since such tests satisfactorily simulate the conditions of the thermal welding cycle in the near-weld zone along with the formation of hot cracks. Findings: the melts of steel to which alloy metals were added displayed higher technological qualities and contained smaller amounts of impurities and hence also were more resistant to the formation of hot cracks than the melts to which industrial ferroalloys were added. Orig. art. has: 1 figure, 5 tables.

SUB CODE: 11,13/ SUBM DATE: 25Jul64/ ORIG REF: 008/ OTH REF: 000

Card 2/2

CZECHOSLOVAKIA

PARRAK, V.; SALAVA, M.

No affiliation given

Bratislava, Farmaceuticky obzor, No 1, [Jan] 1967, pp 1-5

"Twenty first general assembly of the International Pharmaceutical Federation, Madrid, 17-24 September 1966."

HAVA, Miroslav, PhMr. RNdr.

Cooperation between physicians and pharmacists. Cesk. zdravot. 6 no.4: 163-168 Apr 58.

1. Farmaceuticka fakult a MU v Brne.

(PHYSICIANS,
cooperative with pharmacists (Cz))
(PHARMACY,
cooperation between physicians & pharmacists (Cz))

SAIAVA, M., Dr. Phmr.

Organization of pharmacy services. Cesk. zdravot. 7 no.6:277-280 July 59

1. Vedouci katedry farmaceutickeho provozu farmaceuticke fakulty v Brno.

(PHARMACY)

SALAVA, Miroslav, doc.,Dr,PHMR.

Decentralized administration of pharmaceutic services.Cesk.zdravot. 8 no.10:549-560 O'60.

1. Vedouci katedry lekarenskeho provozu farmaceuticke fakulty university v Brne.
(PHARMACY)

YIROUT, I. [Jirout, J.]; SALAVA, M.

Problems and organization of pharmaceutics in the Czechoslovakian Socialist Republic. Apt. delo 12 no.6:73-77 N-D '63. (MIRA 17:2)

1. Farmatsevticheskiy otdel Ministerstva zdravookhraneniya Chekhoslovatskoy Sotsialisticheskoy Respubliki i kafedra farmatsevticheskogo dela farmatsevticheskogo fakul'teta Universiteta imeni Komenskogo.

Salavatov, R. Sh.

ABUZAROV, Kh.G.; SALAVATOV, R.Sh.

Replacing regular burial pits by heat pits. Veterinariia 34 no.7:79-80 Jl '57. (MLRA 10:8)

1. Direktor respublikanskoy veterinarno-bakteriologicheskoy laboratorii Ministerstva sel'skogo khozyaystva (for Abuzarov).
2. Glavnyy veterinarnyy vrach Muslyumovskogo rayona (for Salavatov).
(Dead animals, Removal and disposal of)

Salatskiy, V. I.

24.6600
26.2212
21.1100

83164

S/056/60/039/007/001/044
B006/B056

AUTHORS: Li Ga Yen, Osetinskiy, G. M., Sodnom, N., Govorov, A. M., Sizov, I. V., Salatskiy, V. I.

TITLE: Investigation of the $He^3 + H^3$ Reaction

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 39, No. 2 (8), pp. 225-229

TEXT: The $He^3 + H^3$ reaction develops according to the following modes:

$$He^3 + H^3 \rightarrow Li^6 \rightarrow He^4 + H^2 + 14.31\ \text{Mev} \quad (1)$$
$$\rightarrow He^4 + H^1 + n + 12.08\ \text{Mev} \quad (2)$$
$$\rightarrow He^5 + H^1 + Q$$
$$\downarrow$$
$$He^4 + n + Q \quad (3)$$

The authors determined the total cross section of this reaction by integral neutron counting, using a thin gas target. The ratio between the

Card 1/4

branches of the reaction was determined from the spectrum of the charged particles, measured at a laboratory angle of 90°. The energy of the He^5 decay into $\alpha + n$ was estimated; as a control test, the $H^2 + H^3$ cross section was measured under the same conditions. The tritons, accelerated by an electrostatic generator to 150 - 970 kev, hit the entry window of the gas target; this window consisted of a 0.9 - 1.4 mg/cm^2 thick nickel foil. The target itself was in a vacuum chamber located in the center of a tank filled with a 2% $KMnO_4$ solution. Perpendicular to the beam direction there was a photomultiplier which served as a monitor. The lateral window facing the scintillation counter was closed with a 1 mg/cm^2 nickel foil. The energy losses of the tritons were determined by means of a magnetic analyzer. The temperature of the gas target was measured by means of a thermocouple. The He^3 pressure in the target container was 60 torr. Several further experimental details are given. The results obtained by the experiments are shown in diagrams. Thus, Fig. 1 shows the cross sections of branches (2) and (3) as a function of the triton energies. The root-mean-square error in the range 240 - 970 kev was ±5%, at 149 kev it was ±31%. For comparison, also the

Card 2/4

results obtained by Mook (Ref. 2) are plotted. One of the charged-particle spectra recorded for determining the branch ratios is shown in Fig. 2. The spectrum has two peaks corresponding to the alpha particles and the deuterons of branch (1). Between these peaks is the continuous spectrum of the protons from (2). The proton peak corresponding to the ground state of He^5 is, as regards energy, near the deuteron peak of (1), and could not be separated spectrometrically. Analogous spectra were recorded at triton energies (150 - 950 kev), which were equal in each case. The average fractions of the three branches in the reaction were determined to be (4±2)% (1); (55±2)% (2); (4±1)% (3); the total reaction cross sections in the range 150 - 970 kev amounted to 3.2 - 63.0 mb. From the experimentally determined proton energies of (3), the He^5 decay energy was determined from the relation

$$\varepsilon(He^5) = 0.4\ E_{H^3} - 1.2\ E_{H^1} + 12.08\ \text{Mev, where } E_{H^1} = (9.6 \pm 0.1)\ \text{Mev.}$$

$\varepsilon = (0.8 \pm 0.1)$ Mev was obtained. This value agrees quite satisfactorily with those obtained by other authors. The authors finally thank Professor V. P. Dzhelepov, Professor I. M. Frank, and L. I. Lapidus

Card 3/4

for their interest and discussions, and they also express their gratitude to the members of the generator team I. A. Chepurchenko, S. K. Schetchikov, and M. V. Savenkova. There are 2 figures and 8 references: 3 Soviet and 5 US.

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

SUBMITTED: January 27, 1960

GOVOROV, A.M.; LI GA YEN; OSETINSKIY, G.M.; SALATSKIY, V.I.; SIZOV, I.V.

[Total cross sections of the T+T reaction in the energy range of 60 - 1140 Kev] Polnye secheniia reaktsii T + T v intervale energii 60 - 1140 Kev. Dubna, Ob"edinennyi in-t iadernykh issledovanii, 1961. 26 p. (MIRA 14:10)

(Nuclear reactions)

SALATSKIY V. I.

S/056/62/042/002/012/055
B102/B138

AUTHORS: Govorov, A. M., Li Ka-eng, Osetinskiy, G. M., Salatskiy, V. I., Sizov, I. V.

TITLE: The total cross sections of the T+T reaction in the energy range 60-1140 kev

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42 no. 2, 1962, 383-385

TEXT: The total T+T reaction cross sections were determined on the electrostatic generator of the OIYaI with a thin gas target. Its tritium concentration was 65-93% and pressure was 50-60 mm Hg. The energy dependence of the total cross section can be approximated by $\sigma = (a + b\log E_{kev}) \cdot 10^{-27}$ cm^2, where $a = (-91.2 \pm 2.5)$ and $b = (55.8 \pm 1)$. σ increases monotonically from 10 mb at 60 kev to 82 mb at 1140 kev. The errors are 20-16% between 60 and 100 kev, 12-6.5% between 133 and 392 kev and 6.5-5.1% between 392-1140 kev. F. L. Shapiro is thanked for advice. There are 1 figure and 4 references: 2 Soviet and 2 non-Soviet. The two references to the English-language publications read as follows: H. M.

Card 1/2

The total cross sections of ...

S/056/62/042/002/012/055
B102/B138

Agnew et al. Phys Rev. 84, 862, 1951; N. Jarmik, C. Allen. Phys. Rev. 111, 1121, 1958.

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

SUBMITTED: August 12, 1961

Card 2/2

ACC NR: AP7003871 (N) SOURCE CODE: UR/0133/67/000/001/0044/0044

AUTHOR: Gnuchev, S.M.; Salautin, V.A.; Klochkova, Z.V.; Mazurov, Ye.F.

ORG: none

TITLE: Effect of some processes during steel melting in a 100-ton arc furnace

SOURCE: Stal', no. 1, 1967, 44

TOPIC TAGS: ~~silicon~~ steel production, silicon steel, ~~technology~~ metal melting, arc furnace, steel manufacture process

ABSTRACT: A technological process of making silicon steel in an arc furnace has been developed by the Central Scientific Research Institute of Ferrous Metallurgy im. Bardin in cooperation with the Novolipetsk Metallurgical Plant. The process combines melt-down and oxidizing periods and eliminates ore addition after melting of charge. A water-cooled oxygen lance is used for metal blowing and electromagnetic stirring of melted metal. Nonmetallic impurities are removed by slag treatment while the metal is tapped into the ladle. Oxygen is blown into the bath for 10—15 min when the carbon content reaches 0.08—0.12%. The process decreases the refining period to 1 hr and reduces the oxygen content closer to the equilibrium state and the sulfur content to 0.003%. [AZ]

SUB CODE: 11,13/ SUBM DATE: none/ ATD PRESS: 5114

Card 1/1 UDC: 669.187.2.001.5

TRAKHIMOVICH, V.I., SALAUTIN, V.A., GNUCHEV, S.M.

Methods for determining the technological plasticity of a metal in hot deformation. Zav. lab. 30 no.9:1116-1119 '64. (MIRA 18:3)

1. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii imeni Bardina.

HUSEK, V; SALAVA, M.

Czechoslovakia

Bratislava, Farmaceuticky Obzor, No 10, 1962, pp 467-476

"From the History of the Faculty for Pharmaceutical Service."

CZECHOSLOVAKIA

KONDEL, J; SALAVA, M.

Bratislava, Farmaceuticky Obzor, No 2, 1963, pp 49-52

"First Symposium of Socialist Countries on Medical Technology, Organization of Medical Service and Placing of Doctors."

BENES, Konrad, prof., dr.; SALAVA, Miroslav, inz.

Determining the microhardness of coal seams in the Czechoslovak section of the Upper Silesian Basin. Sbor VSB Ostrava 9 no.2:169-181 '63.

CZECHOSLOVAKIA

SALAVA, M.; STACH, J.

1. Dept. of Pharmacueitcal Supply, Faculty of Pharmacy, Comenius Univ. (Katedra farmacueitckeho provozu farmaceuticke fakulty University Komenskeho), Bratislava (for Salava?); 2. Institute of Public Health Statistics (Ustav pro zdravotnickou statistiku), Prague (for Stach?)

Bratislava, Farmaceuticky obzor, No 11 [November] 1966, pp 514-518

"The possibility of mechanizing some operational and administrative work in pharmacies."

CZECHOSLOVAKIA

SALAVA, M.

No affiliation given

Bratislava, Farmaceuticky obzor, No 11 [November] 1966, p 527

"Study of the possibilities for mechanizing administration in pharmacies."

CALAVA, T.

CZECHOSLOVAKIA

Author: CALAVA, T., Engr.

Title: "Doubts about Hi-Fi."

Source: Prague, Slaboproud technika, Vol IX, No 8, 1961, pp 299-300.

Abstract: High fidelity record players should provide reasonably uniform reproduction to maintain proper acoustical balance. To reproduce a wide range of frequencies, a special cone speaker, two loudspeakers, sound diffusers, etc. are used.

1/1

SALAVA, Tomas, inz.

Approximation of the acoustic radiation impedances of a circular plate by elements independent on frequency. Slaboproudy obzor 23 no.10:600-601 O '62.

KRIVSKY, L.; SALAVA, T.; SNEJDAREK, I.

Recording the ionizing emission of flares and eruptive prominences by the receiver of atmospherics at the Ondrejov Observatory. Biulleten astron inst 14 no.1:5-9 '63.

1. Astronomical Institute of the Czechoslovak Academy of Sciences, Ondrejov (for Krivsky). 2. Institute for Research and Development of Electroacoustics, Prague (for Salava and Snejdarek).

SALAVA, Tomas, inz.

New Tesla cinema loudspeakers. Sdel tech 12 no. 3:92-95 Mr '64.

SALAVA, Tomas, Inz. CSc.

Noise generators for the audio frequency range. Sdel tech 13 no.2:47-50 F '65.

L 34531-66

ACC NR: AP6024771 SOURCE CODE: CZ/0014/65/000/007/0242/0244

AUTHOR: Salava, Tomas (Engineer); Snejdarek, Ivan

ORG: none

TITLE: Horn speaker with large acoustic power

SOURCE: Sdelovaci technika, no. 7, 1965, 242-244

TOPIC TAGS: acoustic property, amplifying equipment/TESLA B45 amplifying equipment

ABSTRACT: The present article presents detailed information about the properties of horn speakers and about special problems in designing and making them, and simultaneously about the new TESLA B45 unit. Formulas are given and the functioning of the speakers is discussed. Orig. art. has: 10 figures and 16 formulas. [JPRS]

SUB CODE: 09, 20 / SUBM DATE: none / ORIG REF: 002 / SOV REF: 001
OTH REF: 001

L 30733-66

ACC NR: AP6022106 SOURCE CODE: CZ/0039/65/026/012/0725/0729

31
B

AUTHOR: Salava, Tomas (Engineer; Candidate of sciences)

ORG: Research and Development Institute of Electroacoustics, Prague (Vyzkumny a vyvojovy ustav elektroakustiky)

TITLE: Transmission response of loudspeakers in an enclosed listening space

SOURCE: Slaboproudy obzor, v. 26, no. 12, 1965, 725-729

TOPIC TAGS: amplifying equipment, sound transmission, acoustic impedence, acoustic measurement, acoustic frequency, acoustic range

ABSTRACT: The article points out the problems of the influence of an enclosed space on the transmission response of loudspeakers. The influence of the impedance on the loudspeaker diaphragm is investigated. A mathematical solution for a lossless space is generalized so as to validate it for a case of space with acoustic losses. This is achieved by a simple modification of the propagation constants. An approximate relation is derived for the frequency limiting from above the region of influence of the natural oscillations in an enclosed space on the power radiated by the loudspeaker. The theoretical conclusions are illustrated by examples of measurements. Orig. art. has: 8 figures, 14 formulas and 1 table. /Based on author's Eng. abst./ /JPRS/

SUB CODE: 09, 20 / SUBM DATE: 16Feb65 / ORIG REF: 005 / SOV REF: 001 / OTH REF: 006

Card 1/1 fv

UDC: 621.395.623.7

L 33267-66

ACC NR: AP6023819 SOURCE CODE: CZ/0014/66/000/002/0046/0047

AUTHOR: Snejdarek, Ivan; Salava, Tomas (Engineer)

ORG: none

12
B

TITLE: Problems encountered in raising the power load of pressure-type loudspeakers

SOURCE: Sdelovaci technika, no. 2, 1966, 46-47

TOPIC TAGS: amplifying equipment/Tesla B-45 amplifying equipment

ABSTRACT: The article presents a survey of the problems which arise in raising the power load of pressure-type loudspeakers and an analysis of the stress of individual components of the Tesla B-45 loudspeaker in service. Orig. art. has: 4 figures. [JPRS]

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 001

Card 1/1 dy

0915 5 18

L 36915-66
ACC NR: AP6027841 SOURCE CODE: CZ/0039/66/027/002/0091/0096

50
B

AUTHOR: Salava, Tomas (Engineer; Candidate of sciences)

ORG: Research and Development Institute of Electroacoustics, Prague (Vyzkumny a vyvojovy ustav elektroakustiky)

TITLE: Problems in evaluating the transmission of transient signals by electroacoustical transducers

SOURCE: Slaboproudy obzor, v. 27, no. 2, 1966, 91-96

TOPIC TAGS: acoustoelectric transducer, signal transmission, signal distortion, electroacoustics

ABSTRACT: The article briefly explains the causes for the considerable distortion of transient signals in electroacoustic transducers. Methods of investigating this type of distortion are surveyed and some currently used methods for measurement of so-called transient response are described in more detail. The problems of recognizability and weight (disturbance power) of transient distortion are discussed, especially the conclusions of the work of Larson and Adducci. The tentative listening tests realized for verification of contestable statements of those authors are briefly described and some basic conclusions are pointed out for evaluating transient distortion from the point of view of perceiving transient signals in music and speech. Orig. art. has: 11 figures, 2 formulas and 3 tables. [Based on author's Eng. abst.] [JPRS: 35,327]

SUB CODE: 09, 17 / SUBM DATE: 22Apr65 / ORIG REF: 001 / OTH REF: 016

Card 1/1 MT UDC: 621.395.6:534.8

0917 1553

L 33204-66
ACC NR: AP6023810 SOURCE CODE: CZ/0014/66/000/001/0002/0006

20
X3

AUTHOR: Salava, Tomas (Engineer; Candidate of sciences)

ORG: none

TITLE: Small loudspeaker systems for high-fidelity sound reproduction

SOURCE: Sdelovaci technika, no. 1, 1966, 2-6

TOPIC TAGS: amplifying equipment, sound transmission

ABSTRACT: The article deals with loud-speaker systems for high-fidelity sound reproduction and the main problems in designing them. The principal systems which have been developed are described. Diagrams and tables of the characteristics of representative Western systems are presented. Orig. art. has: 10 figures, 10 formulas, and 1 table. [JPRS]

SUB CODE: 09 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 008

Card 1/1 pla

0915 1539

SALAVATULIN, R.

Equipment for setting curb blocks and curbstones. Avt.dor. 25 no.4:27-28 Ap '62. (MIRA 15:5)
(Road construction)

SALAVEC, M.

SURNAME (in caps); Given Names

(8)

Country: Czechoslovakia

Academic Degrees: [not given]

Affiliation:

Source: Prague, Fysiatricky Vestnik, Vol XXXIX, No 4, August 1961, pp 215-219

Data: "The Effect of the Storage of Material and the Method of Withdrawal of Blood on Urea Content."

Authors:
JICHA, J
PAZDERKA, J
SALAVEC, M
CELIFROVA, J, Technical Associate (Technicka spoluprace)

Affiliations:
Central Laboratory (Ustredni laborator) - Brigade of social work (Brigada soc [socialni ?] prace), Faculty Hospital KUNZ [abbreviation not identified] (fakultni nemocnice KUNZ), Hradec Kralove; Chief (Prednosta): MUDr Josef Jicha
Internal Clinic I of the Medical Faculty of Charles University (I interni klinika lekarske fakulty University Karlovy), Hradec Kralove; Chief (Prednosta): Prof MUDr Jan Rehor 3/3

3

SALAVEC, M.; RADOCHOVA, D.; SMID, A.; SVANDA, J. CSSR

I. and III Internal Clinic of the Medical Faculty, Charles University (I a III interni klinika lekarske fakulty University Karlovy), Hradec Kralove, dept. director: docent Dr F. Cernik; Military Medical Research and Postgraduate Institute (Vojensky lekarsky vyzkumny a doskolovaci ustav), Hradec Kralove (for all)

Prague, Fysiatricky Vestnik, No 6, 1962, pp 330-333

"Participation of the Haemolytic Component in the Occurence of Anemia in Rheumatoid Arthritis"

4

CHROBAK, Ladislav; POLAK, Jiri; SALAVEC, Miloslav; CERNIK, Frantisek; ANTALOVSKA, Zora; HNIZDOVA, Dagmar.

Hemophilia in the region of East Bohemia (Coagulation studies). Sborn. ved. prac. lek. fak. Karlov. Univ. (Hrad. Kral.) 6 no.4: 365-372 '63.

1. I. interni klinika (prednosta: prof. MUDr. F.Cernik); Detska klinika (prednosta: prof. MUDr. J.Hlecha, DrSc.) a Stomatologicka klinika (prednosta: prof. MUDr. L.Sazama, CSc.).

POLAK, Jiri; CHROBAK, Ladislav; SALAVEC, Miloslav; CERNIK, Frantisek; ANTALOVSKA, Zora.

Incidence of hemophilia in the region of East Bohemia. Clinical manifestations of hemophilia among members of a group. Sborn. ved. prac. lek. fak. Karlov. Univ. (Hrad. Kral.) 6 no.4:373-383 '63.

Problems of hemophilia from the viewpoint of stomatology. Ibid.:409-424.

Diagnostic errors and some social viewpoint in hemophilia. Ibid.:425-434

1. I. interni klinika (prednosta: prof. MUDr. F.Cernik); Detska klinika (prednosta: prof. MUDr. J.Hlecha, DrSc.) a Stomatologicka klinika (prednosta: prof. MUDr. L.Sazama, CSc.).

POLAK, Jiri; CHROBAK, Ladislav; SALAVEC, Miloslav; CERNIK, Frantisek; ANTALOVSKA, Zora.

Incidence of hemophilia in the region of East Bohemia. Clinical manifestations of hemophilia among members of a group. Sborn. ved. prac. lek. fak. Karlov. univ. (Hrad.Kral.) 6 no.4:373-383 '63.

Problems of hemophilia from the viewpoint of stomatology. Ibid.:409-424

Diagnostic errors and some social viewpoints in hemophilia. Ibid.425-434

1. I. interni klinika (prednosta: prof. MUDr. F.Cernak); Detska klinika (prednosta: prof. MUDr. J.Blecha, DrSc.) a Stomatologicka klinika (prednosta: prof. MUDr.L.Sazama, CSc.). Karlova universita v Hradci Kralove.