TIKHOMIROV, I.I., vrach.

Changes in the blood of winterers at Vostok Station. Inform. biul. Sov. antark. eksp. no.31:44-47 '61. (NIRA 1514)

1. Chetvertaya antarkticheskaya ekspeditsiya.
(Vostok Station, Antarctica—Blood—Analysis and chemistry)
TIKHOMIROV, I.I.

Some physiological shifts in the human body during the process of
acclimatization in the intracontinental regions of the Antarctic.
Vest. AN N S S S R 17 no. 3: 74 82 '62.

(ANTARCTIC REGIONS--ACCLIMATIZATION)
TIKHOMIROV, I.I.

Changes in the cardiovascular system during acclimatization in intracontinental area of Antarctica. Biol. oksp. biol. med. 56 no.12:28-31 D 162. (MIRA 17:11)

1. Kafedra normaľnej fiziologii (zav. - prof. P.G. Snyakin)
Moskovskogo meditsinskogo stomatologicheskogo instituta.
TITLE: Changes in the cardiovascular system during acclimatization in the intracontinental regions of Antarctica

SOURCE: Byul. eksper. biologii i meditsiny*, v. 56, no. 12, 1963, 28-31

TOPIC TAGS: acclimatization, Antarctic climate, cardiovascular system, cardiovascular response

ABSTRACT: Effects of low air temperature, low barometric pressure, prolonged polar night, relative isolation, and other environmental factors on the cardiovascular system were studied at the "Vostok" station, located near the South Geomagnetic Pole (78°27'S, 106°52'E). The station is 1300 km from the coast and 3420 m above sea level. Since the average barometric pressure is about 468 mm Hg, the elevation is equivalent to 4000 m absolute atmosphere so far as partial oxygen pressure is concerned. The average annual temperature is...
-55.4°C; the temperature during the warmest month (December) averages
-31.1°C; winter temperatures drop below -88°C. Constant winds prevail,
and the humidity is very low. Pulse and arterial pressure were taken
in a reclining position after a 15-minute rest. A second reading was
taken after 15 deep knee bends performed during a 30-second period.
Complaints of tachycardia and pain in the cardiac area occurred during
the first few days, and increased with time, reaching a maximum toward
the end of the polar night. When polar day set in, complaints dropped
off sharply. Heart murmurs, dilation of the heart, and a drop in the
systolic, diastolic, and pulse pressures occurred in almost all per-
sonnel. Pressures dropped rapidly during the first three months, but
levied off during the polar night (April to August). Lowest pressures
were observed in June; two persons had systolic pressures of 100 mm;
two, 90—95 mm; four, 80—85 mm; and two, below 80 mm. Diastolic pres-
sures varied between 40 and 50 mm during the polar night. Although
in blood pressure of station personnel remained subnormal during the
entire year in the Antarctic, working ability was not seriously im-
paired. Pulse rates accelerated during the first few days but returned
to normal by the end of the third month. At first, systolic pressure
rose markedly by 40 to 55 mm following deep knee bends, then fell off
gradually, and by November did not exceed 10 to 15 mm. Isolated conditions in the interior of Antarctica are believed to exert a depressing effect on the central nervous system, which, in turn, affects the functioning of the cardiovascular system. After six or seven months the cardiovascular system stabilizes at new levels compatible with the requirements of the severe environmental conditions of Antarctica, but reactions to exercise remain marked so that complete acclimatization cannot be said to take place at the end of one year. Orig. art. has: 3 figures.

ASSOCIATION: none

SUBMITTED: 19Oct62 DATE ACQ: 20Jan64

SUB CODE: AM NO REF SOV: 016 OTHER: 003
RESPIRATORY CHANGES DURING ACCLIMATIZATION IN THE INTRA-
CONTINENTAL REGIONS OF ANTARCTICA

ABSTRACT: The effects of polar climate and high altitudes on respira-
tion were studied at the "Vostok" station in the interior of Antarc-
tica. Studies covered respiration rates at rest and after exercise,
respiratory rhythm patterns, the depth of respiration, the composition
of alveolar air, the oxygen concentration of the blood, and the
duration of voluntary breath holding. The respiration of sleeping
subjects was registered by means of electric thermocouples placed
15 cm from the mouth. All station members exhibited tachypnea and
hyperventilation, even when resting. Cheyne-Stokes respiration was observed.
In all subjects, especially when sleeping, the respiration rate rose slightly during the first few days and then dropped. By the end of the year it was about 11—13 inhalations/min. During the first few months the respiration rate rose sharply (by 10 inhalations/min) after exercise (15 knee bends), but by the end of the year it increased by only 5 inhalations/min after the same exercise. Pulmonary ventilation rose sharply at first and then dropped gradually, reaching its lowest point during the polar night, at which time it was only 1.5 times the normal level. Composition of alveolar air adjusted at a new level corresponding to a partial oxygen pressure of 53—56 mm Hg and a CO₂ pressure of 26—29 mm Hg. Despite pronounced hypcapnia, pulmonary ventilation remained high. Blood oxygenation under normal respiration fluctuated between 88 and 76% at the beginning of the stay and eventually stabilized between 87 and 72%. It rose to 89—94% under voluntary hyperventilation. During voluntary breath holding and exercise, hypoxemia rose by 62—80%. Orig. art. has 2 figures.
ACCESSION #: AP4005665
ASSOCIATION: none
SUBMITTED: 19Oct62
SUB CODE: AM
DATE ACQ: 24Jan64
NO REF SOV: 015
ENCL: 00
OTHER: 005
AUTHOR: Tikhomirov, I. I. (Physician)

ORG: The Fourth Continental Expedition (Chetvertaya kontinental'nya ekspeditsiya)

TITLE: Blood composition changes of expedition personnel at Vostok Station

SOURCE: Sovetskaia antarkticeskaya ekspeditsiya, 1955- Informatsionnyy byulleten'. no. 47. 1964. 65-68

TOPIC TAGS: Antarctic climate, hemoglobin, hematopoiesis, erythropoiesis

ABSTRACT: Blood composition changes during acclimatization to Antarctic conditions were studied in 9 healthy, middle aged males of the expedition group at Vostok Station in 1959. Blood indices included hemoglobin levels, erythrocyte and leukocyte counts, differential blood counts, erythrocyte sedimentation reactions, and blood viscosity. The blood indices of subjects determined before arrival aboard ship (12/58) were used as normal values and were compared with blood indices determined during polar days (3/59), during polar nights (7/59) and again during polar days and also at the end of a year's stay (12/59). Findings show
that although the blood composition changes during acclimatization to Antarctic conditions to some extent correspond to the changes found during acclimatization to high altitudes, there are significant differences. Under Antarctic conditions the period during which the hemoglobin level rises is considerably more prolonged; the most intense hemoglobin level increase takes place during the first 2 to 2½ mos, and then the process continues for some time after this period. Erythrocytes reach their maximum level in the blood considerably earlier than hemoglobin; this lag affects the blood color index. The expressed leukopenia found may be attributed to several factors. First of all, the subject lives in an almost completely barren environment with practically sterile air. Secondly, considerably fewer microorganisms enter the digestive tract, with most of the food being frozen or canned. Other factors contributing to leukopenia include depression of the hematopoietic function and deficiency of ultraviolet irradiation. Blood composition changes apparently are not dependent on the season as no significant differences were found between polar days and polar night. Orig art. has: 3 tables

SUB CODE: 06/  SUBM DATE: 07Sep61/  ORIG REF: 000/  OTH REF: 000
TIKHOMIROV, I.I., vrach

Change in blood composition of the wintering-over personnel
at Vostok Station. Inform. biul. Sov. antark. exp. no.47:
65-68 '64. (MIRA 134)

1. Chetvertaya kontinental'naya Antarkticheskaya ekspeditsiya.
TIKHOMIROV, I.I., vrach; NIYAYEV, D.A., maldshiy nauchnyy sotrudnik

Warming air for respiration without exterior heat sources. Inform.biul. Sov.antark.exp. no.41:51-55 '63. (MIRA 17:1)

1. Chotvertaya kentimental'naya ekspeditsiya.
TIKHOMIROV, I.I., vrach

Characteristics of breathing in persons spending the winter at the Vostok Station. Inform.biul.Sov.antark.eksp. no.42:45-48 '63. (MIRA 17:1)

1. Chetvertaya kontinentальная ekspeditsiya.
TIKHOMIROV, I.I., vrach

Observations on the activity of the cardiovascular system in persons spending the winter at the Vostok Station in 1959. Inform.,biul.,Sov. antark. eksp. no.41:57-60 '63. (MIRA 17:1)

1. Chetvertaya kontinental'naya ekspeditsiya.
Tikhomirov, Innokentii K. and Riasantaeva, Zinaida M., Klimat Zavolzh'ya. [Climate of the Transvolga region.]
V. 9, Moscow, 1939. 397 p., 15 maps, 13 figs., 57 + 11 tables, 47 refs. DLG--In Chap. 3 (p. 61-104), entitled "Termicheskiy rezhim" (Thermic regime), the annual variations of air temperature, duration of seasons, soil temperature and soil freezing data are given. The frequency of frosts, variations of frost free periods, extreme data of early autumn and late spring frost based on long period observations are presented and discussed. Subject Headings: 1. Frost frequencies 2. Long period records 3. Frost free period 4. Transvolga Region, U.S.S.R.
1. TIRKHOV, I. K.
2. USSR (600)
3. Libraries, Private

TIKHOMIROV, I. K.

25613 TIKHOMIROV, I. K. Kto byl pervym issledovatelem Khibin? Izvestiya vsesoyuznogo obshchestva, 1949, vyp 4, s 427-428-- Bibliogr: 5 nazv

SO: Letopis' Zhurnal' nykh Statey, Vol. 34, Moskva, 1949
TIKHOMIROV, I. K.

28946. TIKHOMIROV, I. K. Podzemnye Tolchki v Khibinskem Gornom Massive (Kol’skiy Poluostrov) Priroda, 1949, No.9, s.55-57.

SO: Letopis’ Zhurnal’nykh Statey, Vol. 39, Moskva, 1949
"Subterranean Shocks in the Khibinsk Massif,"
I. K. Tikhomirov, 1 p
"Iz v-e Geograf Obshch" Vol LXXXI, No 2
Discusses three subterranean shocks in the Khibinsk mountain massif in the Kola peninsula which occurred on 23 Sep 48.
1. TIKHOMIROV, I. K.

2. USSR (600)

4. Tundras-Khibin Massif

7. Bottomland tundra in the mountain valleys of the Khibin Massif.
   Izv. Vses. geog. obshch. 84 No. 6, 1952

TIKHOMIROV, I.K.

Stages in studying the Khibiny Mountains. Trudy Khib. geog. sta. MGU no. 1:10-66 '60. (MIRA 15:5)

(Khibiny Mountains—Geography)
(Khibiny Mountains—Geology)

Showed that porcelain mixes with a high content of feldspar have a high fire, and much.

Stronger, are more stable than siliceous mixes, and require lower firing temperature. (Sugar

com, 10-11). Data on brown and green glasses are given. M. V. Khudoly.
Properties of high-tension porcelain dependent on its composition. A. N. Empez
and L. N. Tikhomirov. Acad. Sci. USSR, No. 12, 7-10(1932).—American porcelain
was found to contain a high percentage of feldspar; German, a high percentage of
quartz; and Russian, a high percentage of kaolinite. A high feldspar content gave the
highest elec. and mech. strength and best phys. properties. Clays from Borovichi are
the most suitable. The porosity of Russian porcelain was satisfactory. M. V. K.
Properties of high-purity porcelain depend on its composition. A. N. Belyaev and I. M. Tumansky (Keram., 1:1, 1933, pp. 7-10). A high silicon content is associated with highest electrical and mechanical strength and the best physical properties.

Ch. Am.
Properties of high-tension porcelain dependent on its composition. A. N. Romm and I. M. Tishchenko, Kuzma & Noble, 8, No. 12, 7 (1932). American porcelain was found to contain a high percentage of feldspar; German, a high percentage of quartz; and Russian, a high percentage of kaolinite. A high feldspar content gave the highest dielectric strength and best phys. properties. Clays from Borovoi are the most suitable. The porosity of Russian porcelain was satisfactory. M. V. K.
Properties of high-braked porcelain dependent on its composition. A. N. Prokov
and G. M. Tscheremina, Revue des Problèmes, No. 12, 7-10 (1923). - American porcelain
was found to contain a high percentage of feldspar, German, a high percentage of
quartz, and Russian, a high percentage of kaolinite. A high feldspar content gave the
highest electric and mechanical strength and best phys. properties. Clays from Borovichka are
the most suitable. The porosity of Russian porcelain was satisfactory. M. V. K.
ARKHIPOV, Grigoriy Sergeyevich; BARANOV, Oleg Aleksandrovich; PODOBEDOV, Aleksey Nikiforovich; TIKHAIHOV, Ivan Nikolayevich; DMITROVICH, A.M., kand. tekhn. nauk, nauch. red.

TIKHOMIROV, N.I.; KOZUKHOVA, L.A.; TIKHOMIROV, I.N.; KAZITSYN, Yu.V.;
KHARKEVICH, D.S.; PAVLO, Ye.N.; RUDAKOVA, Zh.N.; PAVLOVA,
V.V.; ROZIKOV, M.I.; ALEKSANDROV, G.V.; SHATKO, G.A.;
SOLOV'YEV, N.S.

[Intusive complexes of Transbaikalia] Intruzivnye kompleksy
Zabaikal'ia. [By] N.I. Tikhomirov 1 dr. Moskva, Izd-vo

(NIIA 17:7)
TIKHOMIROV, I.N.

Selection of gas-distribution phases for two-cycle carburetor engines with small cylinder capacity. Avt.prom. 29 no.10:13-14 0 '63.

1. Udmurtskiy gosudarstvennyy pedagogicheskiy institut.
AUTHOR: Tikhomirov, I.N.

TITLE: Critique and Bibliography (Kritika i bibliografiiya)

PERIODICAL: Avtomobil'naya promyshlennost', 1958, Nр 7, pp 44-45 (USSR)

ABSTRACT: This is a review of the book "Mototsikl. Konstruktsiya, teoriya, raschët" (The Motorcycle. Manufacture, Theory, Calculation) by S.I. Ivanitskiy, Yu.V. Ignatov, B.S. Karmanov, and V.V. Rogozhin, published by Mashgiz in 1958. This book is the first treatment of the theme in 11 years and gives sufficient and up-to-date information on motorcycles for students and factory workers in the field. The chapter on the engine fuel supply system is awkward. Also some diagrams and figures of parts are obsolete and have since been replaced. There are 3 Soviet references.

ASSOCIATION: Voronezhskiy sel'skokhozyaystvennyy institut (The Voronezh Agricultural Institute)
Modern outboard motors. Vestnash, 37 no. 6:21-25 Je '57. (VHRA 10:7) (Outboard motorboats)
TIKHOMIROV, I.N., inzhener.

[Working principle and operation of mobile internal combustion engines]
Vol. 2. Ustroistvo i eksploataciiia peredviskhnykh dvigatelei vnutrennego
agoraniia. Moskva, Gos.izd.-vo tekhn. i ekon. lit-ry po voprosam zagotovok,
19(52).

(MLRA 6:7)

(Gas and oil engines--Maintenance and repair)
TIKHOMIROV, I.N., inzh.

Outboard motors in foreign countries. Sudostroenie 29 no.6; 34-37 Ja '63. (MIRA 16:7)
INVENTOR: Dol'nikov, Yu. I.; Bryksin, V. I.; Kushnirov, R. I.; Yakobson, Ya. S.; Delov, V. I.; Sysin, A. Ya.; Tikhomirov, L. S.

TITLE: Device for studying movements in the large joints of upper extremities. Class 30, No. 180296

SOURCE: Izobreteniya, promyshlennye obraztsy, tovarnyye znaki, no. 7, 1966, 46

TOPIC TAGS: biomechanics, prosthesis

ABSTRACT: An Author Certificate has been issued for a device used to study movements in the large joints of the upper extremities. It consists of splints and sensors for recording angular parameters. To obtain quantitative assays of extremity movements and their biotechnological characteristics, it is operated in the form of sleeves which are linked by splints fitted with hinged-joint potentiometers. These are aligned above the center of, or coaxially to, joint rotation. A variation of the above device is equipped with a rotation sensor attached to the shoulder assembly. This sensor is operated in the form of two sleeves mounted on bushings. The wrist is fitted with a forearm.

Card 1/2

UDC: 615.47:612.746-087

APPROVED FOR RELEASE: 07/16/2001   CIA-RDP86-00513R001755610003-3
Fig. 1. Diagram of the device.
1 - Shoulder assembly; 2 - sleeves;
3 - splints; 4 - potentiometers.

rotation sensor with hinged rods attached to the hand. This assembly permits the desired attachment and separate recording of movements in mutually perpendicular planes (see Fig. 1). Orig. art. has: 1 figure. 

SUB CODE: 06/ SUBM DATE: 07Jan65/ ATD PRESS: 2/230
AUTHOR: Tikhomirov, I. V., Candidate of Technical Sciences

TITLE: Automated Reserve Units of Electric Supply With Flywheels (Automatizirovannye rezervnyye agregaty elektrosnabzheniya s makhovikami)

PERIODICAL: Elektricheskoe, 1959, Nr 7, pp 89-91 (USSR)

ABSTRACT: This is an abstract on the basis of data obtained from the foreign press in the course of the past three years. No references are given. Figure 3 shows the 70 kw reserve-unit of the British firm of "Austin Light" (Csinlajt). There are 4 figures.
TIKOMIROV, I.V.

"Referativnyi zhurnal: Elektrotekhnika i energetika." Elektrichesvo
no.12:88 D '61.

(Electric engineering--Abstracts) (Power engineering--Abstracts)

TIKHOMIROV, I.V., kandidat meditsinskikh nauk; ROZHKOY, A.T.

Disturbance of stomach evacuation following resection. Khirurgia no.7:34-36 Jul '55. (MLRA 8:12)
(STOMACH, surg.
gastrectomy, partial, causing disord. in evacuating funct.)
TIKHOMIROV, i.v., kan. med. nauk, zasluzhennyy vrah RSFSR; GUDILOV, 1.P.
(Moskva)

Some aspects of surgical treatment of cardiac cancer. Khirurgiya
40 no.8;78-82 Ag '64. (NRA 10:13)
TIKHOMIROV, I.V., podpolkovnik.

Synchronous generators and automatic voltage regulators of German mobile electric power plants. Vest. elektroproizv. 18 no. 9:17-20 8 '47. (MLEA 6:12)

1. Nauchno-issledovatel'skiy inzhenernyy institut sakhoputnykh voysk. (Germany--Dynamo) (Dynamo--Germany)
"Increasing the Stability of Operation of Mobile Electric Power Stations when Starting Electric Motors of Commensurate Power." Sub 22 Oct 51, Military Red Engineering Academy imeni V. V. Kuybyshhev

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55
TIF'NOHIOEV, L.V., inzh.

Lightweight portable electric power plants, Elektrochistvno no.12: 80-82 D '56. (MIRA 11:3)

(Electric power plants)
motor or commensurate power. Subjected to Eq. 17, required
millIoHms from the starting-squirrel-cage induction motor
recommendation for increasing stability of mobile

37.62
s2 equation regulators. Presents practical
s2 equation excitation is compounded or regulated with
cells formulated for the max voltage drop when main-
exciters suitable for mobile power stations and
cells average cald parameters of synchronous gen-

"Pertinent Information No. 7", pp. 25-33

Sec 1. *Thomson, Noreom
Commonwealth power are being started". Can Tech
Excitation for Station When Exciters Meters of
Increasing the Stability of Operation of Mobile

USSP/Excitation - Power Station, Mobile Jul 25
Experiments With Electroslag Welding in the Ural Chemical Machinery Plant

Electroslag welding used on thick-walled machine parts, i.e., slabs, semi-tiers, flanges and pipe grids is described. Edges are prepared by separation-gas cutting. The welding process on slab is described: The parallelism of welded edges and the rod is tested by a gauge; the wire cooling is checked, because faulty windings affect the quality of welds; the wire speed, the distance between jets and other characteristics are determined according to the weld quality. Sliders are firmly fixed to the edges of the entrance pocket; gaps are filled with a mixture of asbestos and kaolin. The electroslag welding begins after slag pool formation of more than 35 mm depth. At the beginning, slag is formed by the usual electric-arc process, which then changes into the electroslag process. The excitation of the welding arc is improved by addition of 5 - 10 mm metal filings to the bottom of the entrance pocket, topped by 50 - 60 mm flux. During slag forma-
Experiments With Electroslag Welding in the Ural Chemical Machinery Plant

The voltage increases to 50 - 52 V and the wire speed decreases to 100 - 120 m/h. To prevent the escape of melted slag the distance between the electrodes and sliders is increased to 20 - 30 mm. The temperature of joint and edges of base metal is visually controlled, the depth of the slag pool is checked by palpitation. Red-hot joint and edges indicate a uniform welding depth. As sliders become even with the upper edge of the exit strips the upward movement of the welder ceases, the welding current is reduced to 200 - 250 amp and welding stops completely when the slag pool reaches a depth of 35 mm. Mechanical properties of pipe grids, slabs and flanges are improved by heat processing at 880 - 900°C. Semi-tiers are subjected to annealing at 600 - 650°C. Welded joints were inspected by mechanical and ultrasonic tests and by gamma graphitization. Any faults should be corrected immediately after welding before heat and mechanical processing. A second ultrasonic test takes place after heat and before preliminary mechanical processing. The latter is carried out to ensure a sufficiently smooth surface of 6 roughness. During mechanical processing the removal of metal is kept to a minimum, which leaves a margin for correcting any faults by electric welding and subsequent thermal processing. There are 4 figures and 1 table.
TIKHOMIROV, I. Ye., inzh.

Electric welding of slag at the Ural Chemical Machinery Plant. Ehim. mash. no. 6: 43-45 N-D '59. (MIRA 13:3) (Sverdlovsk (Sverdlovsk Province)—Electric welding) (Slag)
TIKHOIROY, K. I. I MATLIN, S. Z.

25156 TIKHOIROY, K. I. I MATLIN, S. Z. Sposob Uvelicheniya Proizvodstva
No. 33.

SO: Letopis' No. 33, 1949
The name of the various investigators are listed. The discussion alights the advances that have been made in this field in other countries. Subjct Headings: 1. Radiant heating 2. Heating and ventilating 3. Radiant heating.—J.L.D.

J.2-183

Thompson, W. V. "Lambert's elliptic in Historia naturale elliptica venenatissimorum tabulatur." [Radiant heating in the history of the development of heating and ventilating techniques.] Gismo & Santorali, Moscow, No. 3-5-15, May 1981. J. leg. D.G.—The development of scientific heating and ventilating techniques and of radiant heating methods, which take into account physiological comfort, in Russia from 1743 to the present is discussed.

APPROVED FOR RELEASE: 07/16/2001 CIA-RDP86-00513R001755610003-3
TIKHOMIROV, K.V.

Dust and number of microbes in the air of buildings heated by an ordinary water system and a ceiling radiant heating system. Gig.1 san., no. 41-42 Apr '54.

1. Iz kafedry kommunal'noy gigiyeny Kasanskogo meditsinskogo instituta. (Dust) (Air—Bacteriology) (Heating)
TIKOMIROV, K.V., inshener.

Experiment in the operation of a radiant heating system. Stroi.
prom. 32 no.3:38-41 Mr '54. (MLRA 7:5)
(Radiant heating)
TIKHOMIROV, K. V.


SOURCE Knizhnaya Letopis' No 6 1956
TIKHOMIROV, K.V.

Viacheslav Avgustovich Iakhimovich; on his 80th birthday. Vod. i san. tekh. no.3:29-30 Je '55. (MLRA 8:12)

(Iakhimovich, Viacheslav Avgustovich, 1875-1942)
TIKHOMIROV, K.V.

Introduction of sanitation equipment stations in rural localities.
Gig. i san. 24 no. 12: 53-55 D '59.

1. Iz kafedry kommunal'noy gigienny Kazanskogo meditsinskogo
instituta. (RURAL HEALTH)
TIKHOMIROV, K.V.

Organization of independent work of students in communal hygiene.
Gig. i san. 24 no. 11: 42-44 N '59. (MIHA 13:4)

1. Iz kafedry kommunal'noy gigiyeny Kasanskogo meditsinskogo
    instituta. (HYGIENE)
TIKHOMIROV, K.V.

Using the overhead heating systems as cooling systems in summer.
Vod. 1 san. tehkh. no. 71:22-26 J1 '58. (MIRA 11:7)
(Radiant heating)
(Air conditioning)
T. T. KOMIROV, K.V. (Kazan')

History of the cooperation of physicians and engineers in problems of heating and ventilating buildings. Gig. 1 san. 23 no. 5;43-47 (MIRA 11:6)

My '58

(HEATING of buildings, cooperation of physicians & engineers (Rus))

(VENTILATION, same)

(PHYSICIANS cooperation with engineers in heating & ventilation of buildings (Rus))
ТТХОМІРОВ, К.В. (Казань)

Бібліографія. Вод. і кан. тех. № 11:37-38 N 164.

(MIHA 18:2)
TIMOMIROV, L., podpolkovnik

Operations in the crossing and landing of a company. Voen.
vest. 41 no.5:98-102 My '61.
(KIRA 14:8)
(Stream crossing, Military)
GLUKHOV, I.A.; TIKHOMIROV, L.A.

Method for obtaining molybdenoytetrachloride MoOCl4. Dokl. AN Tadzh. SSR 3 no. 2:15-18 '60.

1. Institut khimii AN Tadzhikskoy SSR. Predstavlono chlenom-korrespondentom AN Tadzhikskoy SSR R.B. Baratovym.
   (Molybdenum chlorides)
KRAVCHENKO, V.S.; STEFANOV, I.A.; TIKHOMIROV, L.A.; KAMOVNIKOV, B.P.;
GLAZUNOV, A.I.

Automatic maintenance of constant pressure in continuous rectifying
columns. Sprt. prom. 27 no. 3: 29-33 '61. (MIRA 14:4)
(Leningrad—Liquor industry—Equipment and supplies)
(Distillation apparatus)
ABSTRACT: The method of electron paramagnetic resonance was used to study the build-up and recombination of radicals CH₃OH and CH₂OH in the irradiated compounds CaCl₂·4CH₃OH and CaCl₂·3C₂H₅OH. The samples were bombarded with electrons having energies of 1.6 MeV directly in the resonator of an electron paramagnetic resonance spectrometer. The method was limited in the absence of the direct radiolysis technique, as reaction rate constants were not determined.
The reaction rate constant for the reaction:

\[ A + B \rightarrow C \]

has 4 figures.

Institution: Institut khimicheskoy fiziki, Akademii nauk SSSR (Institute of Physical Chemistry, Academy of Sciences).
since it is highly stable. The samples were irradiated with 1.6 Mev electrons
directly in the cavity of the EPR spectrometer so that the change in radical concen-
tration could be observed in real time. This new technique will allow esca-
lar of the number of the free radicals present in a sample. The study and under-
standing of these radicals will aid in the development of new materials.
ABSTRACT: The authors studied the kinetics of annihilation of stable free radicals of 2,2,6,6-tetramethylpiperidine hydroxylamine in frozen isopropyl alcohol irradiated with 1.8 MeV electrons at 100 K. The concentration of free radicals, $N(t)$, and the concentration of stable free radicals, $D(t)$, can be described by the following expression:

$$N(t) = N_0 e^{-kt}$$

$$D(t) = D_0 (1 - e^{-kt})$$

where $D$ is the dose of radiation.

1. ZINOVIEV, A., TIKHOMIROV, K.
2. USSR (600)
4. Machine-Tractor Stations

TIKHOMIROV, Mikh.

"Save our souls" by Sergei Livov. Reviewed by Mikh. Tikhomirov.
Sov. profsoiuzy 17 no. 22: 47-48 N '61. (MIRA 14:10)
(Livov, Sergei)

(Machine-tractor stations--Production standards)(Collective farms--Production standards)
TIKHOMIROV, M.I.

Adopting the practice of harvesting crops in separate stages in the Altai Territory in 1956, Zemledelie 5 no.7:31-39 Jl '57.

(MLRA 10:8)

1. Sibirskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta ekonomiki sel'skogo khozyaystva.
   (Altai Territory--Grain--Harvesting)
KULIK, Gennadiy Vasili'yevich; TIKHOMIROV, Mikhail Ivanovich; LAPIDUS, M.A., red.; GUREVICH, M.M., tekhn.red.; ZUBRILINA, Z.P., tekhn.red.


(Siberia, Western—Agriculture—Costs)
TIKHOMIROV, M. I.

USSR / Cultivated Plants. Cereals.

Abs Jour : Ref Zhur - Biol., No 34599

Author   : Tikhomirov, M. I.
Inst      : Not given
Title     : Generalization of an Experiment in Two-Stage Harvesting in 1956 at Altayskiy Kray


Abstract  : No abstract given.
<table>
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<th>Field</th>
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<tr>
<td>Authors</td>
<td>Agafonov, I. L.; Pavlov, N. B.; and Tikhomirov, M. N.</td>
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<tr>
<td>Title</td>
<td>Ivan Grigoryevich Shcherbakov</td>
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<tr>
<td>Periodical</td>
<td>Zhur. fiz. khim. 28/9, 1707-1712, Sep 1954</td>
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<tr>
<td>Abstract</td>
<td>An eulogy honoring the death of I. G. Shcherbakov (1891-1953), famous Soviet electrochemist, is presented. List of major works by I. G. Shcherbakov is included.</td>
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Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 178 (USSR)

AUTHOR: Tikhomirov, M.N.

TITLE: On the Anodic Dissolution of Copper in Sodium Pyrophosphate (Ob anodnom rastvorenii medi v pirofosfate natriya)

PERIODICAL: Tr. Gor'kovsk. politekh. in-ta, 1957. Vol 13, Nr 5, pp 62-65

ABSTRACT: The process of the production of pyrophosphate of Cu by anodic dissolution in a Na$_4$P$_2$O$_7$ solution, the anodic and the cathodic space being separated by a ceramic partition, was studied. On the basis of the measurement of anodic polarization curves and the determination of the time relationship of the anode potential, the intensity of the current in the bath, and the anodic current efficiency, the following conditions for the anodic solution of Cu were proposed: Anode cd 0.25 amp/dm$^2$ (without stirring) and 0.5-1.0 amp/dm$^2$ (with stirring). In either case the presence of free Na$_4$P$_2$O$_7$ (to the saturation limit) is indispensable. The electrochemical method is proposed for the preparation of the pyrophosphate of Cu solutions containing no substances other than the pyrophosphates of Cu and Na.

Card 1/1 1. Copper phosphates—Production 2. Sodium phosphate solutions—Applications 3. Electrolysis
TIKHOMIROV, Mikhail Nikolayevich

(Cities and towns) (MIHA 8:11)
TIKHOMIROV, MIKHAIL NIKOLAEVICH, 1893

\{Novgorod documents on birch bark; from excavations of 1951

CN398.R9A75

1. Inscriptions - Novgorod, Russia (City)

2. Bark. I. Tikhomirov, Mikhail Nikolaevich, 1893
KLIMIKOV, Sokrat Aleksandrovich; TIKHOMIROV, M.N., akademik, redaktor; KHOVANSKIY, I.P., tekhnicheskiy redaktor


(Bibliography—Moscow—Maps)
SHUNKOV, Viktor Ivanovich; TIKHOVICH, M.N., akademik, otvetstvennyy redaktor; ZOMON, Ye.B., redaktor Izvestii; AIZAN, N.P., tekhnicheskiy redaktor

[Outline history of agriculture in Siberia during the 17th century]
(Siberia--Agriculture)


(MIRA 14:1)
Considered is the process of the formation of non-transparent oxide layers on aluminum and its AlMg (A36), Al-16 (D-16), Al-13 (Al-13), Al-2 and other alloys. A technological process of building up protective and decorative non-transparent layers on aluminum and its alloys in titanium-potassium oxalic acid and chrome boric electrolytes was worked out. A transparent film which is easily colored by organic dyes develops in a chrome-boric electrolyte. No protective and decorative layer was obtained on the Al-2 alloy. The "ematalirovanie" takes place most easily in an electrolyte with the following composition (in g/l): 40 titanium-potassium dioxalate, 8 H₂BO₃, 1, 2 oxalic acid, 1 citric acid; the
New type of anode-treatment of...

temperature of the bath 55°C; pH 1.5 - 2.5; D 2 - 3 a/dm², the tension 60 volts.

Ye. Layner

[Abstractor's note: Complete translation]
JOURNAL ARTICLE TRANSLATION

Transl. No. & Country  Translations Issued By S. M. R. E., Ministry of Fuel and Power  Author

3783  Tribo-Electric Dust Charges  N. N. Toonitsky
07/1190  Zh. tech. Fiz., 10(26), 1723-1726, 1939  M. V. Tikhonirov
U.S.S.R.  I. V. Petrianov

Source: Index Aeronauticus, Vol. 11, No. 6, p 133, June 1955
Charging of dust particles in an electrostatic filter. N. N. Tumikaev, M. V. Tikhomirov and I. V. Pertseznov.


The theory of electric charging of particles proposed by Pauthebiener (C. A. 29, 59) was applied to dust particles with a triboelectric charge. In the case when the accommodation coefficient differs from unity, the expression for the time necessary for full recharging of dust particles which passed the electrostatic filter was obtained. The discharge process of marble-dust particles in an electric field is in accord with the theory of Pauthebiener. Dry coal particles lose their charge more slowly than the charging of marble and coal particles is very similar.

R. Gamow
The spectrum of methane at elevated pressure, in the region of the "fractional" peaks of the C and H, occurring in CH, as a result of processes CH + H and CH3 + 2H. The dependence of the intensity (I) of the primary peak on pressure (P) can be represented by the formula I = f(P) = bP^a, where a is the probability of the primary peak being formed by a collision with an electron, f(P) is the term allowing for the possibility of a change in the number of resultant ions, due to collisions in the ion source, and b is the coefficient of scattering. If the coefficients of scattering are equal for the primary and secondary ions, then the intensity of the secondary peak is kI. For b = 0 and small values of f(P), the I vs. P graph is of the form I = kP. Experiments conducted with a 69 mass spectrometer showed that, for the peaks 11, 12, and 16, the I vs. P is proportional to P, indicating that the cross-section of the reaction CH + C + H is of the order of 10^-14 cm^2.
Effect of Electrons of Different Energies on the Ionization and Dissociation of Some Hydrocarbon Halides

Abstract: The ionization and dissociation of halogen derivatives of hydrocarbons has been carried out with a type MS-1 mass spectrometer, supplemented as follows: (1) automatic scanning of the mass spectrum, (2) automatic recording of the mass spectrum, and (3) introduction of the sample into the ion source. The mass spectra of CH₄, CH₃Cl, CH₂Cl₂, CHCl₃, CCl₄, CH₃Br, and CH₃I have been recorded with electron energies of 100 ev. It is shown that as the number of halide atoms...
Abstract: in the molecule increases, the maximum intensity of the ionic current shifts from the region of molecular ions to that of ions formed by the splitting off of an atom, i.e., dissociation begins to overshadow ionization. Anomalous ions and some secondary processes which occur during ionization and dissociation were investigated. The formation of H2X+ was observed in the mass spectra of some halogen derivatives of methane. The dependence of the ionization and dissociation of the molecules CH³I, C₂H₅Cl₄, CH₃Br, and CH₃Cl on the electron energy (up to 1,100 ev) was investigated. It is shown that as the energy of the ionizing electrons increases, the mass spectra contained fewer fragment ions.
Application of nitrogen-15 in a study of nitrogen nutrition and transformation in plants. P. V. Turchin, M. A. Timoshkina, E. G. Plyusheva, V. V. Tikhomirov, and V. V. Zvetinov. Pochvovedenie 1953, No. 7, p. 12. Post-pond and water cultures with standard nutrients were used to start the plants. Later, the cultures received (NH₄)₂SO₄ enriched with N¹⁵ in various units. After definite intervals the plants were harvested and analyzed. The plants were exposed to this treatment from 15 min. to 240 hrs. In this manner it was possible to follow quantitatively the changes taking place in the respective N fractions. The results show that there is a continuous renewal of protein. This process is highly intensified in the tops of young plants. Within 72-120 hrs. all constitutional protein N is fully renewed. The reserve colloidal dissolved proteins are renewed much slower. The N¹⁵ appears in the constitutional proteins in much earlier stages than in the reserve proteins, which indicates that the synthesis of the former takes place earlier. Both types of proteins are formed much slower in the roots. The data show that 2 hrs. after adding the tagged N it could be detected in the form of amino acids. After 4 hrs. the N¹⁵ was detected in the chlorophyll and proteins. The mobile reserve proteins were found in the roots indicating movement from the leaves. It is postulated that the transformation of these is accomplished by enzyme systems which catalyze the synthesis of amino acids in plants. The intensity of amino acid formation and renewal of protein drops when plants are in the dark.
USSR/Physics - Physical chemistry

Card 1/2

Authors: Tikhomirov, N. V.; Kolotyrkin, V. M.; and Tunitskiy, N. N.

Title: About the dissociation of primary ions in a mass-spectrometer.

Periodical: Dok. AN SSSR 101/3, 903-905, Apr 11, 1955

Abstract: The relation between the intensity of "fractional" n-butane peaks and pressure was investigated to explain the mechanism of primary ion dissociation at greater pressures. It is pointed out that the dissociation at greater pressures. It is pointed out that the dissociation during collision, as in the case of spontaneous decomposition, may depend upon the ion excitation and that the excitation varies depending upon the energy of the ionizing electrons. It was found that the relative intensity of the "fractional" peaks increases with the electron

Institution: The A. A. Zhianov State University, Leningrad

Presented by: Academician A. A. Torenin, November 14, 1954
Card 2/2  Pub. 22 - 32/51

Periodical : Dok. AN SSSR 101/5, 903-905, Apr 11, 1955

Abstract : energy, this is due to the fact that the spontaneous decomposition of the ions and their decomposition during collisions depend in various degrees upon the electron energy. Eight references: 3 German, 2 USSR, 2 USA and 1 English (1939-1953). Graphs.
Tikhomirov, M. V.
USSR/Physical Chemistry - Molecule. Chemical Bond.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14363

Author: Tunitskiy N. N., Smirnova R. M., and Tikhomirov M. V.

Inst:

Title: "Fractional" peaks in the mass-spectrum of hydrogen

Orig Pub: Dokl. AN SSSR, 1955, 101, No 6, 1083-1084

Abstract: During collision of H2 ions with molecules, if the energy of the H2 is great, dissociation takes place with the formation of H+. As a result of this process, the mass spectrum shows a washed-out line of apparent mass 1/2, the intensity of which, with respect to line 2, increases in proportion to the pressure. The relative intensity (RI) of the line 1/2 increases at first with increasing energy of the ionizing electrons, attaining rapidly a practically constant value (the cross section of dissociation =1.4×10^{-16} cm^2). The drop of the line 1/2 near the potential of the appearance of H2 can be
Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14363

Abstract: explained by the formation of unexcited $H_2^+$ ions (with an
infraction of the Frank-Condon principle) for which the
dissociation cross section is less than for excited ions.
It is also possible that, due to the increased period of
existence of the ions in the ion source, there is a
great loss of excitation for small energies of the ion-
izing electrons.
Abstract: An investigation was made of several washed-out peaks in mass spectra of CO$_2$, CO, CH$_2$Br$_2$, CH$_2$I$_2$, C$_2$H$_2$, and C$_2$H$_4$ at ion energies of 2500 ev, electron energies of 70 ev, and an electron beam current of 0.5 ma. These peaks result either from the decay of ions upon collision with molecules and atoms, or from the decay of metastable ions. Results show that the probability of the decay of CO$^+$ with formation of C$^+$ is greater than with the formation of O$^+$, this being in agreement with the affinity of the C and O atoms to electrons. In addition, the difference in the probabilities of decay of CH$^+$ and CH$_2$+ with formation of C$^+$ at various gases, is explained by the difference in the number of particles that break away during the dissociation. The decay probability increases with increasing electron energy (up to 140 ev) and with increasing energy of the primary ions. Bibliography, 11 titles.
Abstract

The dissociation of ion molecules of the type HN\(_2\)Cl by the dissociation have been investigated. The ion molecules are the fractions of the peaks produced by the dissociation of HN\(_2\)Cl and CP2. The dissociation has been investigated up to 2,200 V.