

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30										1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30									
AUTHOR INDEX										INC AND SIM CODES										MATERIALS INDEX									
A. S. S. R. METALLURGICAL LITERATURE CLASSIFICATION																													
P																													
<p>Shlov, I. A. GZHEL-TYPE REFRACTORY CLAYS AS A RAW MATERIAL FOR THE PRODUCTION OF SEWER PIPES. <i>Vodoprovod, Kanalizatsiya, Teplofikatsiya, Sbornik Trudov Moskov. Inst. Inzhener. Kommunal. Stroitel</i>, No. 1, 254-98 (1940).—Experiments in replacing refractory clays by the local Gzhel-type clays were carried out with various clays of the Pavlov-Posadskii deposits. The clays investigated are suitable for the production of sewer pipes according to the All-Union Standard (OST) 68.73. Production processes in the U.S.S.R. are discussed. The clay deposits and the physical-chemical properties of the Gzhel-type refractory clays are described.</p>																													
PROCEDURES AND PROPERTIES INDEX										INC AND SIM CODES																			
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A.C.S.

General

Program of the glass and ceramic industries for the year 1944. I. A. Shtoy. *Shtokovaya i Keram. Prom.*, 1944, No. 1/3, pp. 1-2. — The task of the glass and ceramic industries in the reconstruction of the liberated areas is outlined. Many of the destroyed plants are already rebuilt, and much of the equipment moved eastward during the invasion has been returned. Even the full capacity of these industries as they were before the war is insufficient to cope with the enormous task of rebuilding the war-devastated areas. The need of windowpane glass, brick, and ceramic building materials is enormous. Plans are already drawn up for new plants of vastly increased capacity. They call for plants to be located in the Ukraine, White Russia, the Leningrad and Moscow areas, Transcaucasia, and other parts of the country. Because of transportation difficulties, great stress will be laid on the utilization of raw materials found locally or in the immediate neighborhood. M.H.

2865. INVESTIGATION OF PROPERTIES OF FUSED FIRECLAYS. Pevsner, R. L. and Shilov, I. A. (Bull. Acad. Sci. U.S.S.R., Sl. Sci. Tech., 1946, No.5, 753).

the effect of two fireclays of a 2 $\frac{1}{2}$ -hr period of heating at a temperature corresponding to the refractoriness (1,710°C. and 1,660°C. respectively) is described. An improvement of 40°-50°C. in the refractoriness after fusion, and an increased resistance to slag attack is reported. The results of a petrographic examination of the fused material are given.

Inst. Metallurgy, AS USSR

ASIA - SLA METALLURGICAL LITERATURE CLASSIFICATION

13041 BOMINY
131111 COK G44 151

SHILOV, I.V. (Moskva)

Orientation of birdhouses. Priroda 48 no.6:116 Je '59.

(MIRA 12:5)

(Birdhouses)

SHILOV, I.V., inzh.

Protection of hulls from corrosion. Sudostroenie 24 no.9:76-77
S '58. (MIRA 11:11)
(Hulls (Naval architecture)) (Corrosion and anticorrosives)

SHILOV, I.V., inzh.

Selecting the diameter of discharging pipes used in carbon dioxide
fire extinguishing units. Sudostroenie 25 no.4:67-68 Ap '59.
(MIRA 12:6)

(Ships--Fires and fire prevention)
(Fire extinction--Chemical systems)

SHILOV, K. N.

Tympanal Órgan

Certain data on meso-epitympanitis. Vest. oto-rin. 14, No. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, June 1952. Unclassified.

SHILOV, K.N. (Moskva)

Some clinical variants of chronic suppurative epitympanitis.
Vest.oto-rin. 21 no.1:108-113 Ja-F '59 (MIRA 12:1)

1. Iz otlaringologicheskog otdeleniya (nach. zaslyzhennyy vrach
RSFSR M.M. Filippov) Glavnogo voyennogo gospitalya im. akad. N.N.
Burdenko.

(TYMPANIC MEMBRANE, dis.
epitympanitis, chronic suppurative, clin. variations
(Rus))

SMILAN, B. A.

SMILAN, B. A. - "Investigation of the combustion of shale coke in the effervescent stratum." Tallin, 1955. Acad Sci Estonian SSR. Inst of Power Engineering. (Dissertations for degree of Candidate of Technical Sciences.)

So: Enighnava letoia!, No 48. 26 November 1955. Moscow.

SHILOV, L. A.: Master Tech Sci (diss) --- "Investigation of the burning of shale coke with a boiling layer". Leningrad, 1958. 16 pp (Min Higher Educ USSR, Leningrad Order of Labor Red Banner Technological Inst im Leningrad Soviet), 150 copies (KL, No 4, 1959, 128)

AUTHOR: Shilov, L.A. 23-58-1-4/10

TITLE: On the Diffusive and Kinetic Properties of Kukersite Shale Coke (O diffuzionnykh i kineticheskikh svoystvakh koksa slantsa-kukersita)

PERIODICAL: Izvestiya Akademii nauk Estonskoy SSR, Seriya tekhnicheskikh i fiziko-matematicheskikh nauk, 1958, Nr 1, pp 34-43 (USSR)

ABSTRACT: The Institute of Power Engineering of the AS ESSR asked the Laboratory of Thermophysics of the Leningrad Polytechnical Institute imeni M.I. Kalinin to investigate the diffusive and kinetic properties of shale coke, i.e. the principles of its combustion process. Investigations revealed that at temperatures of 600 - 850° C and with pieces of oil shale of over 600µ size, kinetics may be disregarded and the process considered as taking place in the field of diffusion exclusively. To achieve a high degree of reaction in shale coke it is essential to develop technological processes based on small-sized or crushed coke. There are 4 graphs, 1 diagram and 6 references, all of which are Soviet.

Card 1/2

23-58-1-4/10

On the Diffusive and Kinetic Properties of Kukersite Shale Coke

ASSOCIATION: Institut energetiki Akademii nauk Estonskoy SSR (Institute of Power Engineering of the Estonian SSR Academy of Sciences)
Laboratoriya teplofiziki Leningradskogo politekhnicheskogo **instituta** imeni M.I. Kalinina (Laboratory of Thermophysics of the Leningrad Polytechnical Institute named M.I. Kalinin)

SUBMITTED: September 18, 1957

1. ~~Kukersite~~—~~Combustion~~—~~Analysis~~

Card 2/2

SHILOV, L.A.

Burning coke from kukersite shales in a fluidized bed. Gaz. prom.
no. 6:8-13 Je '58. (MIRA 11:6)

(Coke)

SOV-5-58-10-2/23

AUTHORS: Kondrat'yev, K.Ya., Professor and Shilov, L.A.

TITLE: Several Problems of University Education (O nekotorykh voprosakh universitetskogo obrazovaniya)

PERIODICAL: Vestnik vysshey shkoly, 1958, Nr 10, pp 17 - 23 (USSR)

ABSTRACT: Taking the experience of the Leningrad University as an example, the authors deal with a number of problems in the organization of university activity. The university's principal object at present is to raise the quality of the training of specialists. This can only be achieved by intensifying the contact between university, life and production, by combining study with actual labor in various forms, and by strengthening the material-technical basis of higher education. The regulations for admission should be altered and the organization of study and practical training thoroughly improved. Although adequate in some respects, the former method of enrolling secondary school graduates contained some serious shortcomings; students were inexperienced, were sometimes scornful towards physical labor, politically immature, etc. The enrollment of students at present and in the future will consist of persons having experience in life

Card 1/3

Several Problems of University Education

SOV-3-58-10-2/23

and a work record. The authors stress the necessity for a better organization of practical training, and complain that the suggestions contained in the noted "Letter I-100" pertaining to the students' independence and the overtaxing of the students were not carried out. Training by correspondence and evening courses is also unsatisfactory. Persons attending these courses should be given more time for study, and their job should correspond to the speciality they are studying. The authors go on to examine the new forms of higher education (correspondence study - resident study - correspondence study). It is at present difficult to determine to what extent these systems are acceptable for university education. They claim that grants for scientific work are too small and sometimes are not used rationally. The Matematicheskii institut imeni V.A. Steklova (Institute of Mathematics imeni V.A. Steklov) is used as an illustration. The effectiveness of scientific work is greatly reduced because of the impossibility to publish the works, especially in the field of humanitarian sciences (philology, oriental studies, etc.) and the descriptive parts of natural sciences. A further deficiency is the shortage of scientific journals. The authors also refer to the insufficiency of laboratory equipment and the reduction in staffs. They doubt the ex-

Card 2/3

Several Questions of University Education

SOV-3-58-10-2/23

pedience of a parallel existence of pedagogical vuzes and universities in large cities and point to the benefit derived from uniting small vuzes with large ones. In conclusion the authors deal with the question of propagating scientific knowledge, the post-graduate courses for raising the qualification of engineers and the 2-year courses for foreign languages, organized by Leningrad University.

ASSOCIATION: Leningradskiy gosudarstvennyy universitet imeni A.A. Zhdanova (Leningrad State University imeni A.A. Zhdanov)

Card 3/3

BELINSKAYA, A.V.; BOGUSLAVSKAYA, S.A.; DUBIN, A.S.; PRUSSAK, O.V.;
STARTSEV, V.I.; DAVIDOVICH, Ya.I., doktor yurid.nauk, red.;
KHRUSTALEV, B.F., red.; SHILOV, L.A., red.; VODCHAGINA, S.D.,
tekhn.red.

[Socialist competition in Leningrad enterprises during the
years of the first five-year plan, 1928-1932] Sotsialisticheskoe
sorevnovanie na predpriatiakh Leningrada v gody pervoi piati-
letki, 1928-1932 gg.; sbornik dokumentov i materialov. Pod red.
Ia.I.Davidovicha. Leningrad, Izd-vo Lening.univ., 1961. 343 p.
(MIRA 14:4)

1. Leningrad. Gosudarstvennyy arkhiv Oktyabr'skoy revolyutsii i
sotsialisticheskogo stroitel'stva.
(Leningrad--Socialist competition)

VENEDIKTOV, Anatolii Vasil'yevich, akademik [deceased]; RAYKHER, V.K.,
prof., otv. red.; SHILOV, L.A., red.; VODOLAGINA, S.D., tekhn.
red.

[Organization of state industry in the U.S.S.R.] Organizatsiia
gosudarstvennoi promyshlennosti v SSSR. Leningrad, Izd-vo
Leningr. univ. Vol.2. 1921-1934. 1961. 863 p. (MIRA 15:3)
(Industrial organization)

ZISEL'SON, Ye.I.; TYUL'PANOV, S.I., red.; SHILOV, L.A., red.

[Restoration of industry in Leningrad, 1921-1924] Vosstanovlenie promyshlennosti Leningrad, 1921-1924 gg. Leningrad, Izd-vo Leningr. univ. Vol.1. 1963. (Its: Vosstanovlenie i nachalo rekonstruktsii promyshlennosti Leningrad, 1921-1928 gg.; dokumenty i materialy, no.1) (MIRA 16:10)

1. Leningrad. (Province) Gosudarstvennyy arkhiv Oktiabr'skoy revolyutsii i sotsialisticheskogo stroitel'stva. (Leningrad--Industries)

I 13288-66 EWT(d)/EWT(m)/EWP(v)/EWP(j)/T/EWP(k)/EWP(h)/EWP(l) RM

ACC NR: AP6000321 (A)

SOURCE CODE: UR/0286/65/000/021/0010/0010

INVENTOR: Belotelov, N. A.; Verkhorubov, B. A.; Kal'noy, V. G.; Kryuchkov, A. D.; Litvin, A. P.; Mel'nichenko, V. Z.; Morozov, G. N.; Olerinskiy, B. I.; Klebanova, I. S.; Solnyshkin, L. M.; Fridman, A. N.; Shilov, L. A.; Shchutskiy, S. V.; Yanovskiy, E. A.

ORG: none

TITLE: A device for automatic control of an installation for polymerizing gaseous olefins. Class 12, No. 175923 [announced by the Leningrad Affiliate of the All Union Scientific Research and Design Institute for Chemical Machine Building (Leningradskiy filial Vsesoyuznogo nauchno-issledovatel'skogo i konstruktorskogo instituta khimicheskogo mashinostroyeniya)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 21, 1965, 10

TOPIC TAGS: polymerization, olefin, chemical engineering, automatic control equipment

ABSTRACT: This Author's Certificate introduces a device for automatic control of an

Card 1/3

UDC: 66.05-5 : 66.095.26 : 678.742.2

L 13288-66

ACC NR: AP6000321

installation for polymerizing gaseous olefins, e.g. in production of low pressure polyethylene. The unit consists of two temperature controllers connected to a flow regulator for the product reactor, and a pressure regulator connected to the controller for the coolant. For increased productivity and optimization of the process, one temperature controller is connected through a speed reducer to the pressure controller which is connected through a second speed reducer to the flow regulator for the product reactor. The other temperature controller is connected to the flow regulator for the coolant.

Card 2/3

L 13288-66

ACC NR: AP6000321

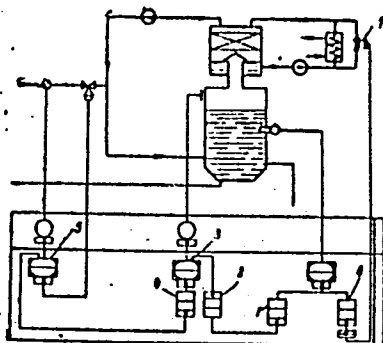


Fig. 1. 1 - first temperature controller; 2 - first speed reducer; 3 - pressure regulator; 4 - second speed reducer; 5 - flow regulator for the product; 6 - second temperature controller; 7 - flow regulator for the coolant.

SUB CODE: 07/ SUBM DATE: 01Feb65/

Card 3/3

KOZHIN, A.P.; SHILOV, L.A.

Vibration surface grinder. Suggested by A.P. Rozhin, L.A.
Shilov . Rats. predl. no. 37:8 '59. (MIRA 14:1)
(Grinding machine)

1. SHILOV, M.
2. USSR (600)
4. Factories - Heating and Ventilation
7. Economizing compressed air. Za ekon. mat. No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

SHILOV, M.N.; SKIBO, N.S.; ROGOZHINA, N.V.; SHAPOSENIKOV, Ya.P.;
STEPANYUK, A.I.; APTEKAREV, M.A.; NEVZOROV, P.L.; TABAKO, P.I.;
ALEKSEYEVSKIY, V.L.; ARTEMOV, H.N.; GRABOVSEIY, V.V.; MNOGOLET,
V.Ya.

[Cultivation practices for increasing crop yields in Grozny Province] "Agrotekhnicheskie meropriyatia po povysheniiu urozhainosti dlia Groznenskoj oblasti." Grozny, Groznenskoe obl.izd-vo. Pt.1. [Cultivation of field crops] Polevodstvo. 1945. 178 p. (MIRA 13:8)

1. Groznyy. Oblastnoy zemel'nyy otdel. 2. Glavnyy agronom Groznenskogo Oblastnogo zemel'nogo otdela (for Shilov). 3. Groznenskiy Oblastnoy zemel'nyy otdel (for Skibo, Rogozhina, Shaushnikov, Stepanyuk, Aptekarev). 4. Direktor Opytnoy stantsii Groznenskoy oblasti (for Grabovskiy). 5. Inspektor Inspektury po sortoispytaniyu zernovykh i maslichnykh kul'tur i trav Ministerstva sel'skogo khozyaystva SSSR (for Mnoolet).

(Groznyy Province--Field crops)

SHILOV, M.N.

Northern boundary of the habitat of *Rhombomys opimus* Licht in conditions of the Northern Ural region. Bnl.MOIP. Otd.biol. 58 no.5:3-10 '53.

(MLRA 6:11)

(Ural Mountain region--Rodentia)

VARSHAVSKIY, S.N.; SHILOV, M.N.

Effect of agricultural activity on the territorial distribution and settling of the large desert mouse (*Rhombomys opimus* Licht). Dokl. AN SSSR 93 no.5:903-906 D '53. (MLRA 6:12)

1. Predstavleno akademikom Ye.N.Pavlovskim.

(Field mice)

SHILOV, M.N.

Hares in Ust-Urt. Priroda 43 no.11:116-117 N '54. (MLRA 7:12)

1. Aralomorskaya stantsiya Ministerstva zdravookhraneniya SSSR.
(Ust-Urt--Hares)

KRYLOVA, K.T.; SHILOVA, Ye.S.; SHILOV, M.N.

Characteristics of the ecology of the jird (*Rhombomys opimus* Licht.)
during the winter period in the northern Aral Sea region. *Biol.MOIP*
Otd.biol. 59 no.2:3-14 Mr-Apr '54. (MLRA 7:6)
(Aral Sea region--Rodentia) (Rodentia--Aral Sea region)

VARSHAVSKIY, S.N.; SHILOV, M.N.

Practical use of automobiles in counting large desert mouse
(*Rhombomys opimus* Light.) populations. *Biol. MOIP. Otd. biol.*
59 no.3:37-48 My-Je '54. (MLBA 7:7)
(Gerbils)

VARSHAVSKIY, S.N.; SHILOV, M.N.

Biological principles and methodology of predicting changes in the population of gerbils (*Rhombomys opimus* Lich.) in the desert zone of the northern Aral Sea region. Trudy probl. i tem.sov. no.5:12-22 '55. (MIRA 8:12)

1. Aralomorskaya protivochumnaya stantsiya
(Aral Sea region--Gerbils)

VARSHAVSKIY, S.N.; SHILOV, M.N.

Method of calculating gerbil colonies from a car and some results
of its use. Trudy probl. i tem.sov. no.5:23-24 '55. (MLRA 8:12)

1. Aralomorskaya protivochumnaya stantsiya
(Gerbils)

SHILOV, M. N.

Ancistrodon halys, a carrion-eating serpent. Biol.MCIP.Otd.biol.
61 no.4:86 JI-Ag '56. (MIRA 10:8)
(UST-URT--SERPENTS) (ANIMALS, FOOD HABITS OF)

VARSHAVSKIY, S.M.; SHILOV, M.N.

Dry varihervaceous valleys in the northern part of the Aral region, landscape features and ecological characteristics of the valleys and their intrazonal significance in the desert zone [with summary in English]. *Biul.MOIP.Otd.biol.* 63 no.3:41-55 My-Je '58.
(MIRA 12:3)

(ARAL SEA REGION--BIOTIC COMMUNITIES)

VARSHAVSKAYA, S.N.; SHILOV, M.N.

Spring and summer feeding habits of common raven in the northern part of the Aral Sea region [with summary in English]. Zool.zhur. 37 no.10: 1521-1530 0 '58. (MIRA 11:11)

1. Aralomorskaya protivochumnaya stantsiya Ministerstva zdravookhraneniya SSSR (Aral'sk).
(Aral Sea region--Raven) (Birds--Food)

SHILOV, M. N.

"The characteristics of the distribution of the jerboa in the plague foci of northern Ustyurt and near Ustyurt." Page 275

Desyatoye soveshchaniye po parazitologicheskim problemam i prirodnoochegovym bolezniam. 22-29 Oktvabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 254pp.

Aralamorskaya Antiplague Station

PONOMAREV, N.A.; SHILOV, M.N.

Use of an aerovisual method for calculating the number of
colonies of large gerbils. Voen.-med. zhur. no. 6:84 Je '60.
(MIRA 13:7)

(GERBILS)

SHILOV, M.N.

Enzootic characteristics of plague in the northern Ust Urt and
the area north of it. Biol. MOIP. Otd. biol. 65 no.5:137-138 8-0
'60. (MIRA 13:12)

(AKTYUBINSK PROVINCE—PLAGUE)
(GERBILS AS CARRIERS OF DISEASE)

SHILOV, M.N.

Notes on some reptiles in the northern part of the Aral Sea region.
Trudy Inst. zool. AN Kazakh. SSR 15:170-176 '61. (MIRA 14:7)

1. Aralomorskaya protivochumnaya stantsiya Ministerstva
zdravookhraneniya SSSR.
(Aral Sea region--Reptiles)

KRYLOVA, K.T.; VARSHAVSKIY, S.N.; SHILOVA, Ye.S.; SHILOV, M.N.; PODLESSKIY, G.I.;
KOMARDINA, M.G.

Characteristics of interspecific contact in colonies of the greater
gerbil (*Rhombomys opimus* Licht.) in the northern part of the Aral
Sea region. Zool. zhur. 40 no.3:434-446 Mr '61. (MIRA 14:3)

1. Aral Sea Anti-Plague Station and Aral Branch of the Moscow
Society of Naturalists.
(Aral Sea Region--Gerbils as carriers of disease)

ROTSHIL'D, Ye.V.; SHILOV, M.N.; SMIRIN, V.M.; SHILOVA, Ye.S.

Surface food supply piles of the greater gerbil (*Rhombomys opimus*
Licht.). *Biul. MOIP. Otd. biol.* 66 no.6:43-50 N-D '61. (MIRA 14:12)

(ARAL SEA REGION--GERBILS)
(ANIMALS, FOOD HABITS OF)

SHILOV, M.N.

New occurrences of cats in the Ust-Urt. Biul.MOIP.Otd.biol.
67 no.4:154-155 J1-Ag '62. (MIRA 15:10)
(UST-URT--CATS)

VARSHAVSKIY, S.N.; SHILOV, M.N.; DUBYANSKIY, M.A.; YEREMITSKAYA, N.A.;
YEREMITSKIY, N.Ya; VOLODKIN, A.V.

Brief news. Biul. MOIP. Otd. biol. 68 no.4:152-158 J1-Ag '63.
(MIRA 16:10)

GARBUZOV, V.K.; SHILOV, M.N.

Distribution of the steppe pika in the Aral Sea region.
Biol. MDIP. Otd. biol. 68 no.4:37-43 J1-Ag '63. (MIRA 16:10)

SHILOV, M.N.

AID P - 723

Subject : USSR/Electricity
Card 1/1 Pub. 29 - 16/26
Author : Shilov, M. N., Eng.
Title : Limiting time relay stopping no-load run of motors of
metal working machine-tools
Periodical : Energetik, 9, 20-22, S 1954
Abstract : The author briefly describes the arrangement.
2 diagrams.
Institution : None
Submitted : No date

SHILOV, M.N.

High-pressure fan for forging furnaces. Vest.mash. 35 no.12:
60-61 '55. (MIRA 9:5)

(Fans, Mechanical)

9(6)

AUTHORS:

Silkin, Yu. A., Shilov, M. P.

SOV/76-32-11-26/32

TITLE:

The Use of the Balanced Electronic Bridge EMP-209 for Recording Thermograms (Primeneniye elektronnoy uravnoveshenogo mosta EMP-209 dlya zapisi termogramm)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 11, pp 2634-2636 (USSR)

ABSTRACT:

The Kurnakov pyrometer used in thermographic investigation methods has some disadvantages. The industrially manufactured electronic potentiometers of the types EPP-09, and EPD-09, as well as others, are free of such disadvantages. These potentiometers are, however, not very sensitive. Much more reliable investigations can be made with balanced electronic bridges. The sensitivity to voltage of the balanced electronic bridge scheme (Fig 1) with a resistance thermometer for measuring temperature changes is determined according to an equation. The sensitivity and the amplifier coefficient in balanced bridges are not lower than in the amplifiers of potentiometers. As the amplifiers do not have vibration transformers the operation of the whole instrument is more reliable. By a

Card 1/2

The Use of the Balanced Electronic Bridge EMP-209 for Recording Thermograms

SOV/76-32-11-26/32

modification of the measuring scheme of the bridge (Fig 2) as carried out in the present case ordinary and differential temperature recordings can be made at the same time. There are 2 figures and 4 Soviet references.

SUBMITTED: February 27, 1958

Card 2/2

AID P - 3592

Subject : USSR/Aeronautics
Card 1/1 Pub. 58 - 9/26
Author : Shilov, N.
Title : In the aeroclub of Kurovsk
Periodical : Kryl. rod., 11, Insert, N 1955
Abstract : This article consists of several photos whose captions describe various activities of the aeroclub. Several names are mentioned.
Institution : Aeroclub of Kurovsk
Submitted : No date

SHILOV, Nikolay ,

Land of giants. Sov. foto 20 no. 12:2-4 D '60. (MIRA 14:1)
(Krasnoyarsk Territory--Economic conditions)

SHILOV, Nikolay, brigadir ekskavatorshchikov

When work goes well. Transp. stroi. 13 no.7:43 J1 '63.
(MIRA 16:9)

1. Trest Kaztransstroy.
(Excavation)

SUSLOV, L., inzh.; SHILOV, N., inzh.; SHUMAKHER, L., inzh.

Rural construction requires precast elements. Zhil. stroi.
no.10: 28-29 0 '61. (MIR. 14:10)
(Precast concrete construction)

SHILOV, N.

We are drawing the participation of the activist group. Fin.
SSSR 37 no.6:83 Je '63. (MIRA 16:9)

1. Nachal'nik upravleniya Gosstrakha Karel'skoy ASSR.
(Karelia--Insurance) (Karelia--Trade unions--Officers)

SHILOV, N., inzh.

Construction in the virgin lands needs prefabricated elements.
Zhil. stroi. no.6:17-20 '63. (MIRA 16:10)

YERMOKHIN, N., general-major artillerii; VEKSLER, I., podpolkovnik; SHILOV,
N. Inzhener-podpolkovnik

Methodological skill plus programmed instruction. Tekh. i vooruzh.
no.4:36-40 Ap '64. (MIRA 17:9)

ACC NR: AP7005135

SOURCE CODE: UR/0126/66/022/004/0606/0610

AUTHOR: Sarrak, V. I.; Shilov, N. A.

ORG: TsNIICHERMET

TITLE: The influence of cobalt on the tendency of iron toward brittle fracture

SOURCE: Fizika metallov i metallovedeniye, v. 22, no. 4, 1966, 606-610

TOPIC TAGS: iron base alloy, cobalt iron, brittleness, low temperature metal, transition temperature, tensile property, internal friction, activation energy

ABSTRACT: A study was done on the influence of cobalt on the brittle fracture of iron at low temperatures. The iron had the following compositions: 0.01-0.02% C, 0.20% Si, 0.17% Mn, 0.012% S, 0.0035% P, 0.013% O, 0.007% N, and 0.002% H. Impact testing was done at temperatures ranging from -192 to +100°C. The iron samples had a constant grain size of 35-40 μ and were alloyed with 5 and 10% Co. The impact strength, given as a function of temperature, showed that 5% Co lowered the transition temperature by 20°C, and 10% Co lowered it by 40°C. Tensile testing was done at temperatures ranging from +20 to -196°C at a constant crosshead speed of 2 mm/min. Tensile samples had a diameter of 10 mm and a gage length of 50 mm. The tensile strength and ductility were given as functions of temperature for pure and alloyed iron. The tensile transition temperature for pure iron was -100°C and -125°C for 5% Co. Five ten-

UDC: 539.4

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ACC NR: AP7005135

side regions were separated on the basis of strength and ductility changes as a function of temperature. The mechanism by which cobalt improves the plasticity of iron at low temperatures was determined from internal friction properties on 0.8 mm samples which were vacuum-annealed to a constant grain size of 35-40 μ m. A reverse pendulum was used to get the amplitude dependence of internal friction at temperatures ranging from 70 to 470°C. At low amplitudes (below about $4-15 \cdot 10^{-5}$ depending on temperature) the internal friction was independent of amplitude, while at higher amplitude it was proportional to amplitude. The slope in the amplitude dependent range was related to dislocation mobility or the energy for dislocation climb (ΔW). Values of $\lg \Delta W$ were given as a function of $1/T$ for the 10% Co alloy. Below 300°K, ΔW decreased as a result of increased lattice friction, while the sharp increase in ΔW above 500°K was caused by the locking of dislocations with interstitial impurities. The Cottrell relation for the concentration of impurities locking dislocations as an exponential function of temperature was given. Between 300 and 500°K, ΔW was not a function of temperature. The activation energies for dislocation interaction with impurity atoms (U_d) and the activation energies of mobile dislocations (U_r) were given for each alloy. Alloying with cobalt decreased both U_d and U_r , as well as the saturation temperature for impurity atoms. Thus cobalt had the same effect as nickel. Orig. art. has: 5 figures, 1 table, 3 formulas.

SUB CODE: 11/ SUBM DATE: 09Nov65/ ORIG REF: 009/ OTH REF: 001

Card 2/2

SHILOV, N. I.

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Natural Sciences and Engineering, Vol. 5, p. 381,1955.

SHILOV, N. I.

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no.5:6-8 My '55. (MLBA 8:6)

1. Director Fabriki "Krasnaia Talka."
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SHILOV, N. I., Colonel

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SO: Sum. No. 480, 9 May 55

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(Reviewer)

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(ARAL SEA REGION--MAMMALS)

5412 TV, *atomnaya energiya*

LAKHANIN, Vladimir Vladimirovich, professor, doktor tekhnicheskikh nauk;
~~SHILOV, Nikolay Mikhaylovich, dotsent, kandidat fiziko-matematicheskikh nauk;~~ FEDOROV, V.P., redaktor; LAVRENOVA, N.B., tekhnicheskii redaktor

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(Atomic ships)

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1. Mining engineering

2. Tunneling

1 Udalkin, M.B. jt. au.

SHILOV, Nikolay Vasil'yevich; IL'YASHENKO, Nikolay Antonovich; UDALKIN,
Mikhail Borisovich; TARASOV, I.Ya., redaktor; PARTSEVSKIY, V.N.,
redaktor izdatel'stva; PETROVA, N.S., tekhnicheskij redaktor

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Я. М. Хурин
Стационарные вынужденные процессы в статистической радиофизике.

11 июня
(с 18 до 22 часов)

М. С. Александров
Распределение разности фаз колебаний в совокупности флуктуирующего сигнала, шумов и коррелированной шумовой помехи.

В. С. Фабрикант
Некоторые теории конструктивной теории информации для дискретного канала с шумом помехи.

О. С. Шахов
Определение вероятности потерь сообщения в план. канале с помехами и потерями информации.

Р. Р. Верманов
[Некоторые вопросы теории линейного кодирования]

12 июня
(с 10 до 15 часов)

Н. П. Бобров
Системы передачи дискретных сигналов с фазовой разностью напутствующей.

6

Н. М. Ткаченко
Оптимальный прием сигналов с КИМ с неизвестным моментом приема.

**Г. И. Русина,
Г. М. Халашова**

Системы связи передачи информации.

**Г. И. Русина,
Г. М. Халашова**

О некоторых флуктуациях электрического поля в среде с периодичной структурой и протекании информации.

А. А. Савин

Некоторые соображения по построению прибора связи «ВАЛ-КОД».

12 июня
(с 18 до 22 часов)

В. И. Маричин

Групповая передача информации сигналами в неперспективе.

Л. Д. Клементьев

Вопросы оптимальной помехоустойчивости при передаче сигнала.

7

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(Telephone)

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SHILOV, G.S.

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1. Odesskiy elektrotekhnicheskiy institut svyazi.

KOPP, Mark Filippovich; KHARKEVICH, Anatoliy Dem'yanovich; SHILOV,
Oleg Semenovich; SANOYLENKO, Yevgeniy Andrianovich;
MARKOVICH, Aleksandr Yakovlevich; RESHETNIKOV, N.V.,
retsenzent; METEL'SKIY, G.E., otv. red.; OBRAZTSOVA, Ye.A.,
red.

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SHILOV, P. [Shylov, P.] doktor tekhn.nauk, prof.

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SHILOV, B.M.; KARMANOV, V.V.; BAGRAMOV, E.S.; YEVSEYEVA, A.M.; LUKOMSKIY, I.K.; ROTOVA, M.N.; BELOVA, L.G.; MARTYNOV, V.I.; obshchiy red.; SHILOV, P.D., red.; VENIGERSKAYA, S.R., tekhn.red.

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kand.tekhn.nauk

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no.8:77-79 Ag '62. (MIRA 15:8)

1. Dnepropetrovskiy gornyy institut (for Duganov).
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SHILOV, P.G.

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SHILOV, P.I.

25179 Shilov, P.I. Analiz Dopuskov Tochnosti Geodezicheskikh S''emok Pri Dorozhnykh
Izyskaniyakh. Trudy Mosk. Avtomob-Dor, In-ta im. Molotova, VYP.11, 1949, C. 37-57

SO: Letopis' No. 33, 1949

SHILOV, P. I.

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<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Shilov, P. I.	"Geodesy" (2d edition)	Moscow Automobile Highway Institute

SO: W-30604, 7 July 1954

Годарика [Годарика]. Изд. 2-е. Москва, Географгиз, 1953. 304 p.

SO: Monthly List of Russian Acquisitions, Vol 7, No 4, July 1954.

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[Geodesy] Geodeziia, Izd.3-e, ispr. i dop. Moskva, Izd-vo geodezicheskoi lit-ry, 1956. 395 p. (MLRA 9:5)
(Geodesy)

SOV/154-58-1-21/22

AUTHOR: Shilov, P. I., Professor, Doctor of Technical Sciences

TITLE: A Hand-Book on Least Squares (Ob odnom posobii po sposobu na imen'shikh kvadratov)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka, 1958, Nr 1, pp 165-169 (USSR)

ABSTRACT: In this book review the author discusses the hand-book "On Least Squares" by Professor A. P. Yushchenko published in Leningrad in 1956 by "Morskoy transport" (Ocean Shipping), Publishers. It was written mainly for educators and candidates for chairs of navigation. According to the reviewer this little hand-book has many merits. Everything noteworthy with regard to the manifold questions on probability theory, the method of least squares, the theory of errors and on many others is discussed in a concentrated form using examples from practical experience. In spite of its great merits the reviewer thinks that the hand-book also is deficient in certain respects. They are mainly: repetitions, in a few cases a style which is too vague, conclusions which can be accepted conditionally only and other things. In his review

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A Hand-Book on Least Squares

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the author only regrets these deficiencies as they reduce
the value of this hand-book which otherwise is good.

ASSOCIATION: Moskovskiy avtomobil'no-dorozhnyy institut
(Moscow Institute of Highways)

Card 2/2

SOV/154-58-2-1/22

AUTHOR: Shilov, P. I. Professor, Doctor of Technical Sciences

TITLE: Maximum Permissible Errors in Measurements and Adjustments
(Predel'nyye oshibki rezul'tatov izmereniy i uravnoveshivaniy)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka, 1958, Nr 2, pp 3-14 (USSR)

ABSTRACT: The probability α that the standard error t will lie between the symmetrical limits $-t_\alpha \div +t_\alpha$, that is to say that $t_\alpha > t > -t_\alpha$... formula (4), is expressed by the integral of formula (5) having the same limits. The inequalities (4) which correspond to the inequalities (6) $t_\alpha \sigma > \Delta > -t_\alpha \sigma$ show that the random error Δ lies within the limits of $-t_\alpha \sigma$ and $+t_\alpha \sigma$ and is also determined by formula (5). Three cases are investigated:
1) $l_1, l_2 \dots l_n$ are values of a constant quantity X obtained by a series of equally accurate and independent measurements. Formulae (9) and (10) are derived. The left and right parts of the inequalities (6), (9), and (10) are in geodesy termed maximum permissible errors. These formulae express the limiting values

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Maximum Permissible Errors in Measurements and Adjustments

of the random errors Δ and Δ_s (the arithmetic mean). The errors in turn, are determined by the probability α which is near unity. α being given, t_α is obtained by means of a table compiled with the help of formula (5). If it is desired to increase the accuracy and reliability of the true value derived from the arithmetic mean of the measurements, it is pointed out that a demand for better accuracy entails a rapid increase of the number of measurements. Attempts should be made not only to increase the number of measurements taken, but also to improve on the quality of measurements by selecting the right instruments and method, and by exercising great care when taking the measurements. 2) Measurements of unequal weight $l_1, l_2 \dots l_n$, which are free of constant and systematic errors and were carried out independently, of the same constant quantity X with the weights $p_1, p_2 \dots p_n$. It is shown that in evaluating a series of measurements of an unknown quantity the maximum permissible error in the result of the desired unknown quantity for the given probability α can be determined by assuming a def-

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Maximum Permissible Errors in Measurements and Adjustments

inite probability α and assuming that random errors in the measurements conform to the normal law of distribution. 3) Similarly, the method of least squares can be used in determining u unknown quantities from a system of $n > u$ linear equations. In this case, as well as in the adjustment of measurements of an unknown quantity, difficulties arise: usually the theoretical value σ of the mean square deviation of the unit of weight is unknown. In practice, therefore, approximations are used. There are 7 tables and 5 references, 5 of which are Soviet.

ASSOCIATION: Moskovskiy Avtomobil'no-dorozhnyy institut (Moscow Highway Institute)

SUBMITTED: March 3, 1958

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MAZMISHVILI, Abram Ivanovich, prof., doktor tekhn.nauk; BELYAYEV, Boris Ivanovich, nauchnyy sotrudnik, kand.tekhn.nauk; SHILOV, P.I., prof., doktor tekhn.nauk, retsenzent; PAVLOV, F.F., prof., doktor tekhn.nauk, red.; PAVLOV, F.F., red.; SHURYGINA, A.I., red.izd-va; ROMANOVA, V.V., tekhn.red.

[The method of least squares] Sposob naimen'shikh kvadratov.
Izd-vo geod.lit-ry, 1959. 370 p. (MIRA 13:2)

1. Kafedra Marksheyderskogo dela Moskovskogo gornogo instituta im. I.V.Stalina (for Belyayev).
(Least squares) (Surveying)

3(4)

SOV/154-59-3-3/19

AUTHOR:

Shilov, P. I., Professor, Doctor of Technical Sciences

TITLE:

On the Basis of the Method of Least Squares (K obosnovaniyu sposoba naimen'shikh kvadratov)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos'yemka, 1959, Nr 3, pp 23 - 31 (USSR)

ABSTRACT:

First, the method of the least squares is explained. Next, A. M. Legendre who introduced this method for the first time in 1806 and his theory are quoted. It is further shown that the solution of the problem under the condition of a dispersion minimum of a weight maximum leads to the same normal and weight equations as the solution under the condition $[pv^2] = \min$. The method of the least squares is shown to yield values of unknown quantities with the greatest weight, regardless of both the distribution law to which the casual measuring errors obey, and of the number of measurements. The principle of the greatest weight, which is assumed as the basis of the method of the least squares, is found to correspond to the assumption on which the Legendre rule is based. Next, the method of the least squares introduced by Gauss independently of Legendre, and the

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respective theory are dealt with. In this connection, reference is made to Academician A. A. Markov, who developed the Gauss theory further, and to his letter addressed to A. V. Vasil'yev (Ref 2). Finally, the author of the present paper deals with the application of the principle of the greatest veridity in mathematical statistics, which likewise leads to the method of the least squares (Ref 4). The application of the principle of the greatest veridity is found to lead also to the solution according to the method of the least squares. This principle is not founded on a strict basis, and is regarded as an empirical rule (Ref 3). To be true, the method of the least squares according to Gauss yields the most reliable values for unknown quantities, but is not convenient in all cases. P. L. Chebyshev (Ref 5) is quoted in this connection. Concerning other methods applied in the case of adjustment computations, reference is made to the paper (Ref 6). There are 6 Soviet references.

ASSOCIATION: Moskovskiy avtomobil'no-dorozhnyy institut (Moscow Automobile Highway Institute)

SUBMITTED: March 13, 1959
Card 2/2

SHILOV, Petr Iosifovich; KULESHOV, D.A., prof., retsenzent; KOLOSOV,
~~D.A., dots., retsenzent;~~ LEVCHUK, G.P., dots., red.;
SHURYGINA, A.I., red. izd-va; SUNGUROV, V.S., tekhn. red.

[Geodesy] Geodeziia. Moskva, Izd-vo geodez. lit-ry, 1961.
392 p. (MIRA 15:2)

(Geodesy)

S/154/60/000/004/001/004
B012/B054

AUTHOR: Shilov, P. I., Doctor of Technical Sciences, Professor

TITLE: The Use of Matrices and Vectors in the Method of Least Squares

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka, 1960, No. 4, pp. 23-41

TEXT: In the introduction of the present paper, the author gives a survey of studies on the improvement of the method of least squares, the application of this method, and the use of matrices in geodetic adjustments. He mentions papers by Professor N. A. Urmayev (Ref. 1), Academician A. N. Kolmogorov (Ref. 2), doctor's theses by A. I. Mazmishvili (Ref. 3), V. A. Romanov (Ref. 4), the candidate's thesis by A. F. Krastin' (Ref. 5), papers by Yu. A. Gordeyev (Refs. 6,7), the graphic adjusting method by V. V. Kavrayskiy and N. G. Kell', the catalog of foreign publications compiled by R. P. Makeyev, a paper by S. G. Makover (Ref. 10), papers by G. M. Bazhenov (Ref. 13, and in the

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The Use of Matrices and Vectors in the
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Uchenyye Zapiski Khar'kovskogo Gosudarstvennogo Universiteta im. Gor'kogo (Scientific Notes of the Khar'kov State University imeni Gor'kiy), 1949, No. 8), and a paper by S. L. Khublarova (Ref. 14) on the investigations of TsNIIGAIK concerning the mechanization of solutions of extensive normal equation systems. It is pointed out that the choice of the form of writing down equations and formulas depends on the particular problem. Therefore, it is not necessary to keep to a certain form of writing down only because of the "unity of style". Some problems of the theory of adjusting indirect measurements are dealt with. First, the transition from observational equations to normal equations is investigated. Formula (1.2) is written down as an observational equation for indirect measuring. The transition (on Legendre-Gauss's condition) from (1.2) to normal equations is simplest if the observational equation is represented in vector form: formula (1.10). The scalar products of the vectors in (1.10) are replaced by the corresponding scalar quantities, and formula (1.15) is obtained. On the basis of this derivation, the coefficients of the unknown quantities and the free terms of the normal equations may be regarded as products of two vectors. For the purpose of comparing, the

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transition from observational to normal equations is realized by the combination of formulas in vector and matrix form: formula (1.20) is derived. It expresses the normal equation system (1.15) in matrix form. The comparison shows that in this case the formula is shorter whereas the first derivative (formula (1.15)) is more illustrative. It is pointed out that the matrix form is very convenient in determining unknown quantities and estimating their accuracy. Next, the author investigates the control formulas for checking the solutions of normal equation systems. He writes down the matrix from the coefficients of the unknown quantities of system (1.15): formula (2.1). This matrix corresponds to the quadratic form Φ : formula (2.4). From the latter, the author derives the linear equation system (2.6) which in the matrix form is represented by (2.7). Thus, every quadratic form (2.4) corresponds to the corresponding linear equation system (2.6), and vice versa. From (2.6), the author obtains another equation (2.8) for the quadratic form as the bilinear form of the variables x, y . The relationship between the quadratic and bilinear form on one hand, and the system of normal equations on the other, has a practical value for the numerical solution

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of these equations, for the control of the solutions, and for estimating the accuracy of measurement- and adjustment results. The quadratic form (2.4) is transformed into (2.13). Formulas (2.8) and (2.13) are applied to normal equation systems, and formulas (2.26) and (2.27) are obtained. Formula (2.28) is finally obtained with their help. From this formula, Φ can be calculated either with the aid of (2.26) in dependence on the values obtained for the unknown quantities or with the aid of (2.27), independently of these values. This guarantees a reliable and complete control of the total solution of the respective normal equation system. From formula (2.27), Φ can be determined from the scheme for the solution of normal equations with a certain structure of Φ according to the rule established by Professor N. I. Idel'son (Ref. 17). The 3rd chapter deals with the weight coefficients Q. The author studies the system of equations (2.7) and the corresponding system (2.6). He derives formula (3.23), and shows that the quality of the unknown quantities depends both on the quality of measurements and on the choice of the system of unknown quantities. If the system of unknown quantities was obtained by the method of least squares, the spread of the unknown

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quantities will show minimum values thanks to the weight coefficients. Formula (3.23) shows that the results obtained on the basis of the principles of least spread of unknown quantities are identical with the results obtained on the basis of least square errors. There are 17 references: 13 Soviet, 2 German, 1 Danish, and 1 Belgian.

ASSOCIATION: Moskovskiy avtomobil'no-dorozhnyy institut (Moscow Automobile and Highway Institute) ✓

SUBMITTED: January 20, 1960

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SHILOV, Petr Iosifovich, zasl. deyatel' nauki i tekhniki RSFSR,
~~doktor tekhn.nauk~~, prof.; LEVCHUK, G.P., red.;
BRAZHNIKOV, V.I., red.izd-va; ROMANOVA, V.V., tekhn.red.

[Geodesy] Geodeziia. 2. izd., ispr. i dop. Moskva, Gos-
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Choice of suitable types of respirator for rescue work in the potash mining industry. P. I. Shilov. *Kalil* (U. S. S. R.) 6, No. 4, 40-3 (1947). — The results of physiol. tests carried out on subjects wearing 3 types of respirators, viz., the RKR-1, the Draeger 1924 and the KIP-3 are described. The tests were done under standard conditions at external temp. of 10-50°, at 10° intervals. For all types of app., analyses of exhaled air showed that the CO₂ content increases sharply when the external temp. is raised from 20° to 30°, while at 40° and 50° it falls below that for 30°.

B. C. P. A.

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