CHEKIN, V.YA?

37660   Dva slucheya anginozno- nekroticheskikh porazhehiy polosti
rta i zeva pri c-avitaminoze. vestnik otorinolaringologii, 1949. No. 6,
s. 61-63

SO: Letopis' Zhurnal'nykh Statey vol. 37. 1959

38353   CHEKIN, V. YA.

Iskhod gematom posle ushibov pri gipovitaminoze S. Sov. Meditsina, 1949,
No 12, s. 31-32

CM

The state of secretory, excretory, and enzymic gastric functions in C avitaminosis. V. Ya. Chekin. Terapevt. Arkh. 22, No. 6, 63-4(1950).—Clinical human cases show lowered HCl secretion, reduced amt. of gastric secretion, and slow elimination of gastric content (parenteral test with neutral and revealed either very slow elimination or complete retention). The digestive (enzymic) potency of the gastric juice is similarly depressed.   G. M. Kosolapoff

cA

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Hematopoesis in vitamin C deficiency. V. Ya. Chekin. *Trudpesl. Arkh.* 23, No. 4, 80-4(1951).—In vitamin C deficiency there occurs an increase of red blood cell count and a high level of reticulocytosis in bone marrow and peripheral blood. Administration of the vitamin leads to increased mitosis and increased count of young cellular forms in the blood. In C avitaminosis there takes place a form of marrow deficiency in respect to blood formation: particularly in the maturation of erythrocytes. At the same time the generation of cells of myeloid type is also repressed.

G. M. Kosolanoff

CHEKIN, V. Ya.

Ascorbic acid content in gastric juice. Klin. med, Moskva
29 no.8:39-41 Aug 1951.   (CLML 20:11)

1. Candidate Medical Sciences.

CHEKIN, V. Ya.

177164

USSR/Medicine - Vitamins   Oct 51

"Supply of Vitamin C in the Regular Diet of the Population of Polar Regions," V. Ya. Chekin

"Priroda" Vol XXXIX, No 10, PP 53

Meat and int organs of reindeer contain considerable amt of Vitamin C: there are 4.2-12 mg% of Vitamin C in meat, 12-22 mg% in heart tissue, 60-137 mg% in the liver, 81-120 mg% in brain tissue, 8-25 mg% in the meat of the tongue, 42-93 mg% in kidneys, 74-181 mg% in lung tissue. Blood of reindeer contains 0.57-2.06 mg% of Vitamin C as compared with 0.7-3.7 mg% in blood of cattle (V. N. Bukin) and 0.61-2.1 mg%

LC   177T64

USSR/Medicine - Vitamins (Contd)   Oct 51

in blood of cattle in polar regions (V. Ya. Chekin). Population of extreme North thus gets sufficient supply of Vitamin C by consuming fresh raw meat. This was not generally understood hitherto, because meat and int organs of cattle contain much less Vitamin C than those of reindeer, caribou, and seals.

LC   177T64

CHEKIN, V.Ya.

Prevention of scurvy in extreme north. Sovet. med. No. 2:28-29 Feb 52.

(CIML 21:5)

1. Candidate Medical Sciences. 2. Komi ASSR.

CHEKIN, V. Ya.

Evaluation of vascular tonus in electroshock therapy. Zh. nevropat. psikhiat., Moskva 52 no. 3:27-29 Mar 1952.   (CLML 22:1)

1. Candidate Medical Sciences. 2. Of the Central Hospital-Poly-clinic Amalgamation (Head — Ye. K. Butko), Vorkuta, Komi ASSR.

aE-27   351.586:612.27   2

Chekin, V. YA., K voprosu o vliianii meteorologischeskikh faktorov na sosudistyl tonus (The influence of meteorological factors on vascular tone) ... Arkhi vrAhm Moskva 23 : 71 Jan-Feb 1953   6 refs   DLC—The ...

The influence of atmospheric pressure upon vascular tone was investigated by measuring the arterial pressure of 312 males in a northern region during seasons when the barometric pressure varied 30-40 mm a day. Blood pressure was found to vary with changes in atmospheric pressure; and the varia-tion was greatest in diastolic pressure. At an atmospheric ... of 765 ...

... pressure was raised in 5.8% of the cases at 742 ...

... pressures. Same item as 5.8-256, Aug 1954 ... effects 2. Blood pressure.—I. L. D.

1. Atmospheric pressure

CHEKIN, V.Ya.,

Requirements and methods of administration of vitamin C. Medych.
Zhur.24 no.1:94-98 '54.   (MLRA 8:10)

1. TSentral'na likarnya M. Vorkuta, Komi ASSR.
        (VITAMIN C,
             requirements & admin.)

CHEKIN, V. YA.
USSR/Botany

Card 1/1

Author   : Chekin, V. Ya.

Title   : Vitamin-carriers of the tundra

Periodical   : Dokl. AN SSSR, 96, Ed. 2, 383 - 385, May 1954

Abstract   : The quality of vegetables grown near the north pole region (in tun-
                   dras) is not inferior to the quality of vegetables grown in more
                   southern latitudes. On the contrary, tundra grown vegetables contain
                   more vitamin C than other vegetables. Practical utilization of tun-
                   dra grown plants rich in vitamin C for medicinal purposes is perfectly
                   feasible. The collection and preparation of materials are not compli-
                   cated. Of greatest importance is the drying of leaves because upon
                   the drying depends the percentage of loss and preservation of the
                   ascorbic acid. The drying of leaves should be carried out at a mod-
                   erate temperature of 50 - 60°. Five USSR references. Tables.

Institution   : ....

Presented by   : Academician A. L. Kursanov, February 27, 1954

Translation — Title R-

CHEKIN, V.Ya., doktor meditsinskikh nauk

Vitamin C metabolism in injuries. Sov.med. 19 no.4:70-71 Ap '55.
(MLRA 8:6)

1. Iz bol'nitsy Vorkuty Komi ASSR.
   (VITAMIN C, metabolism,
    in trauma)
   (WOUNDS AND INJURIES, metabolism in,
    vitamin C)

CHEKIN, V.Ya., doktor meditsinskikh nauk (g. Vorkuta, Komi ASSR, Kra-
    shoarmeyskaya ul., d. 15, kv. 4)

    The problem of cavernotomy. Vest.khir. 75 no.3:20-25 Ap '55.
                                                        (MIRA 8:7)
    1. Iz TSentral'noy bol'nitsy Vorkuty (glavnyy vrach- V.Ya.Chekin).
        (TUBERCULOSIS, PULMONARY, surgery,
            cavernotomy)

CHEKIN, V.Ya., doktor meditsinskikh nauk (Vorkuta, Komi ASSR)

Certain phases of gastric function in vitamin C insufficiency.
Terap.arkh. 28 no.2:81-85 '56.   (MLRA 9:7)
        (GASTRIC JUICE,
            secretion in scurvy (Rus))
        (SCURVY, physiology,
            gastric secretion (Rus))

CHEKIN, V.Ya.,doktor meditsinskikh nauk.

Some results of extrapleural pneumothorax. Probl. tub. 34 no.1:
30-32 Ja-F '56   (MLRA 9:5)

1. Iz TSentral'noy bol'nitsy Vorkuty (glavnyy vrach V.Ya. Chekin)
        (PNEUMOTHORAX, ARTIFICIAL
            extrapleural, results)
        (COLLAPSE THERAPY
            pneumolysis, results)

Chekin, V. Ya.

CHEKIN, V.Ya.; AKIN'SHINA, N.G. (Petrozavodsk)

Blood transfusion in tuberculosis. Sov.med. 21 Supplement:10 '57.
   (TUBERCULOSIS)   (MIRA 11:2)
   (BLOOD--TRANSFUSION)

CHEKIN, V.Ya., doktor meditsinskikh nauk (Petrozavodsk)

"Man's acclimatization in the north" by G.M. Danishevskii.
Reviewed by V. IA. Chekin. Klin. med. 35 no.1:147-148 Ja '57
(MLRA 10:4)

1. Glavnyy terapevt Kirovskoy zheleznoy dorogi.
(ARCTIC REGIONS--CLIMATE)
(MEDICAL GEOGRAPHY)

CHEKIN, V.Ya., doktor med.nauk

Report on the First Conference on Problems in Climatopathology in
the Clinical Treatment of Cardiovascular Diseases. Terap.arkh. 31
no.11:90-93 N '59.   (MIRA 13:3)
        (CARDIOVASCULAR SYSTEM--DISEASES) (CLIMATOLOGY, MEDICAL)

CHEKIN, V.Ya.

Relation between silicosis and tuberculosis. Arkh. pat. 22 no. 8:34-
38 '60.   (MIRA 14:1)
         (TUBERCULOSIS) (LUNGS—DUST DISEASES)

CHEKIN, V.Ya.

Characteristics of vitamin C metabolism in inhabitants of the
northern zone. Probl. Sev. no.6:120-129 '62.   (MIRA 16:8)

1. Upravleniye vrachebno-sanitarnoy sluzhby Oktyabr'skoy
zheleznoy dorogi.
                    (ASCORBIC ACID)
             (RUSSIA, NORTHERN—VITAMIN METABOLISM)

CHEKIN, V.Ya. (Leningrad)

Report on the second scientific conference on problems of climatology
in the clinical aspects of cardiovascular diseases.   Vest. AMN SSSR
18 no.9:76-79 '63.
(MIRA 17:9)

CHEKIN, V. Ya., doktor med.nauk.

Results of the Second Scientific Conference of the Institute
of Therapy od the Academy of Medical Sciences of the U.S.S.R.
on problems of climatopathology in the clinical aspects of
cardiovascular diseases. Sov. Med. 27 no.7:151-153 Jl.'63.
(MIRA 16:9)

(CARDIOVASCULAR SYSTEM—DISEASES)
(CLIMATOLOGY, MEDICAL)

DMITRENKO, V.P.; CHEKINA, T.A.

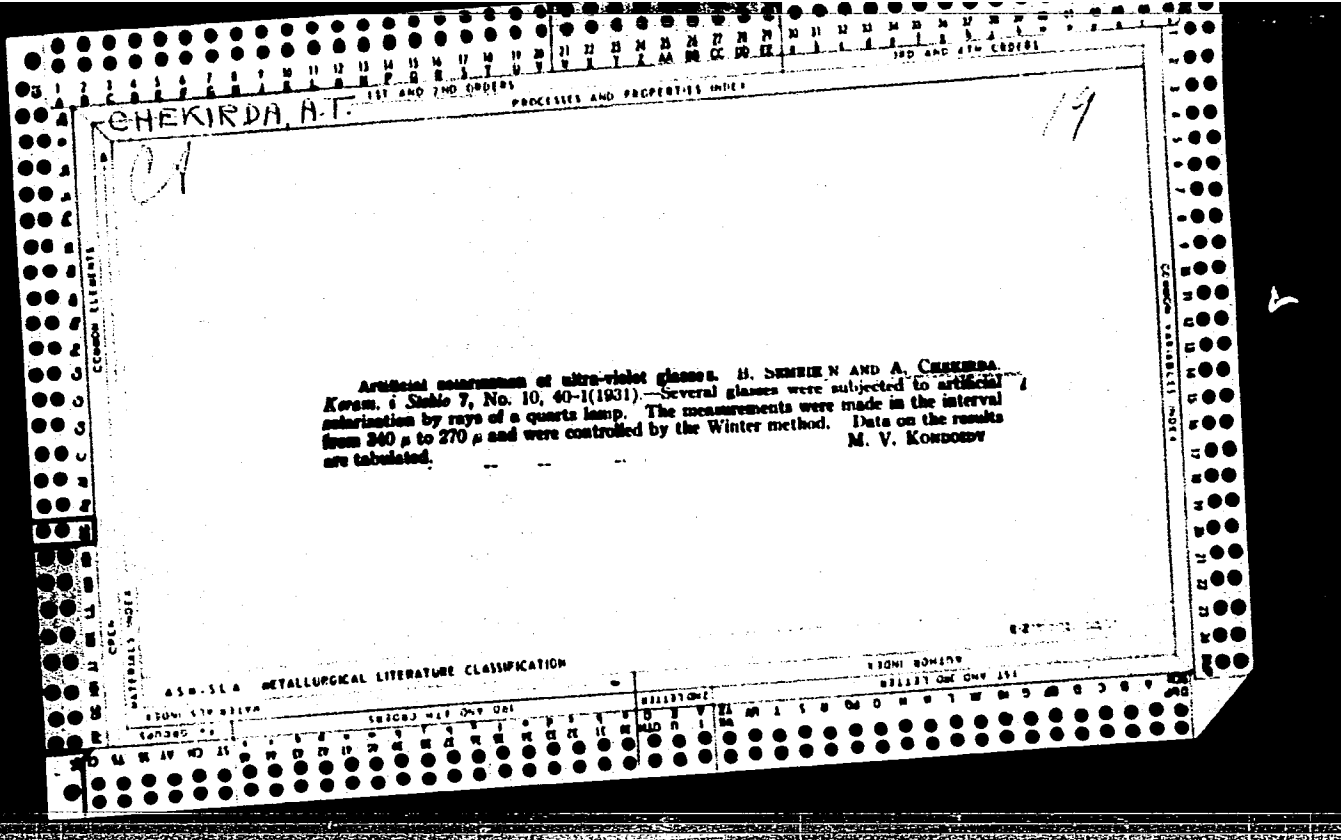Dependence of the rates of development of buckwheat on some meteorological elements. Trudy Ukr NIGMI no.49:23-34 '65.

(MIRA 18:8)

CHEKINI, V.; TITSKIY, M.

Semiautomatic line without converters for ▓▓▓ processing of poultry.
Mias.ind. SSSR 33 no.3:6-7 '62.
(MIRA 15:7)

1. Poltavskiy mashinostroitel'▓▓ zavod myasnogo oborudovaniya.
(Poultry plants—Equipment and supplies)
(Assembly-line methods)

CHEKIRDA, A.T.

Artificial weathering of ultra-violet glasses. H. SEMERN AND A. CHEKIRDA. Keram. i Stehlo 7, No. 10, 40-1(1931).—Several glasses were subjected to artificial solarization by rays of a quartz lamp. The measurements were made in the interval from 340 μ to 270 μ and were controlled by the Winter method. Data on the results are tabulated. M. V. KONDOROV

METALLURGICAL LITERATURE CLASSIFICATION

CHEKIRDA, H.T.

PROCESSES AND PROPERTIES INDEX

Gas-filled lamps giving daylight. B. E. Semeikin and
A. T. Chekirda. J. Tech. Phys. (U. S. S. R.) 4, 605-8
(1934).—Some data are given for the emission spectra of
several vacuum and gas-filled elec. lamps.   F. H. R.

41988. BARABASHEV, N. P., CHEKIRDA, A. T., FEDORETS, V. A.-- Ob osveshchennosti
        zemnoy poverkhosti primym i rassennym solnechnym. Ushen. Zapiski
        khar'k. Gos. un-ta im. Gor'kogo, T. XXVIII. Publikatsii Astron.
        Observatorii, t. VIII, 1948, S. 21-27

SO: Letopis' Zhurnal'nykh Statey, Vol. 47, 1948

BARABASHEV, N.P.; CHEKIRDA, A.T.

Red-, yellow-, green-, and blue-light spectrophotometry of Mars.
Tsir. Astron.obser. Khar.un. no.9:3-28 My '52.   (MIRA 9:4)
    (Mars (Planet)) (Spectrophotometry)

CHEKIRDA, A.T. (Khar'kov).

Brief news. Astron.tsir. no.133:12 Ja '53.

(MLRA 6:6)
(Planets)

CHEKIRDA, A.T.

Plenum of the Committee on Planetary Physics of the Astronomical
Council of the Academy of Sciences of the U.S.S.R., held on
June 8-10, 1953. Astron.tsir. no.140:21-22 Ag '53.   (MLRA 7:1)
                                                 (Astrophysics)

CHEKIRDA, A.

Third plenary session on the physics of planets.   Astron.tsir.
no.161:21-24 Jl'55.   (MIRA 8:12)
                    (Planets)

CHEKIRDA, A.T.

BARABASHOV, N.P.; CHEKIRDA, A.T.

Comparing the color and the luminosity ratio of different regions
of the moon's surface with some terrestrial rocks. TSir.Astron.obser.
Khar.un. no.15:9-15 '56.   (MIRA 10:5)
                              (Moon—Surface)

BARABASHOV, N.P.;CHEKIRDA, A.T.

Comparing the color and the luminosity ratio of different regions
of the moon's surface with some terrestrial rocks. Astron. zhur. 33
no.4:549-555 Jl - Ag '56.   (MLRA 9:11)

1. Khar'kovskaya astronomicheskaya observatoriya.
    (Moon--Surface)

CHEKINDA, A.T.

2K(0); 5(4); 6(2)   PHASE I   BOOK EXPLOITATION   SOV/2215

Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni
D.I. Mendeleyeva

Referaty nauchno-issledovatel'skikh rabot; sbornik No.2 (Scientific
Research Abstracts; Collection of Articles, Nr 2) Moscow,
Standartgiz, 1958. 139 p. 1,000 copies printed.

Additional Sponsoring Agency: USSR. Komitet standartov, mer i
izmeritel'nykh priborov.

Ed.: S. V. Reshetina; Tech. Ed.: M. A. Kondrat'yeva.

PURPOSE: These reports are intended for scientists, researchers,
and engineers engaged in developing standards, measures, and
gages for the various industries.

COVERAGE: The volume contains 128 reports on standards of measure-
ment and control. The reports were prepared by scientists of
institutes of the Komitet standartov, mer i izmeritel'nykh
priborov pri Sovete Ministrov SSSR (Commission on Standards,
Measures, and Measuring Instruments under the USSR Council of
Ministers). The participating institutes are: VNIIM -
Vsesoyuznyy nauchno-issledovatel'skiy metrologii imeni D.I.
Mendeleyeva (All-Union Scientific Research Institute of Met-
rology imeni D.I. Mendeleyev) in Leningrad; Sverdlovsk branch
of this institute; VNIIK - Vsesoyuznyy nauchno-issledovatel'skiy
institut Komiteta standartov, mer i izmeritel'nykh priborov
(All-Union Scientific Research Institute of the Commission
on Standards, Measures, and Measuring Instruments), created
from MGIMIP - Moskovskiy gosudarstvennyy institut mer i
izmeritel'nykh priborov (Moscow State Institute of Measures
and Measuring Instruments) October 1, 1955; VNIIFTRI -
Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhni-
cheskikh i radiotekhnicheskikh izmereniy (All-Union Scientific
Research Institute of Physicotechnical and Radio-engineering
Measurements) in Moscow; KhGIMIP - Khar'kovskiy gosudarstvennyy
institut mer i izmeritel'nykh priborov (Khar'kov State Institute
of Measures and Measuring Instruments); and NGIMIP - Novosi-
birskiy gosudarstvennyy institut mer i izmeritel'nykh priborov
(Novosibirsk State Institute of Measures and Measuring Instru-
ments). No personalities are mentioned. There are no references.

Kandyba, V.V., V.Ya. Finkel'shteyn, A.T. Chekinda, and I.A.
Rumyantsev (KhGIMIP). Measuring the Free Combustion Temperature
of Basic Industrial Fuels   86

Levin, G.M., A.K. Semenova, and V.I. Volmir (Sverdlovsk Branch
of VNIIM). Studying Characteristic Curves of Thermal Inertia
in Thermal Sending Devices   87

Gomel'skiy, K.Z. (Sverdlovsk Branch of VNIIM). Determining
Thermal Capacity of Solids at High Temperatures   87

Levin, G.M., and E.M. Malkova. (Sverdlovsk Branch of VNIIM).
Studying Methods for Determining Thermal Characteristics of
Materials on the Basis of the Theory of Regular Thermal Condi-
tions   89

Iosel'son, G.L., and B.S. Estrin (KhGIMIP). Developing and
Creating an Automatic Thermostat for Checking Standard Thermometers
With Values of Division 0.1°C or Less   90

Card 18/27

AUTHOR: Chekirda, A. T., Candidate of   SOV/30-58-8-21/43
               Physical and Mathematical Sciences

TITLE: From the Council of Astronomers (V astronomicheskon sovete)
               Transactions of the Plenary Meeting of the Committee of
               Planetary Physics (Plenum Komissii po fizike planet)

PERIODICAL: Vestnik Akademii nauk SSSR, 1958, Nr 8, pp. 113-114 (USSR)

ABSTRACT: This plenary meeting was held in Khar'kov from May 20-22. It
               was attended by the astronomers of a number of observatories
               of the USSR, by representatives of the Council of Astronomers
               and by the Director of the Nanking Observatory Chzhan Yuy-
               chzhe. Results of observations of the surface of Mars and of
               the moon in 1956 were the subject of the reports. The following
               lectures were held:
               V.V. Sharonov stated that the surface of Mars is darker and
                    more red than corresponding samples from terrestrial
                    deserts.
               N.P. Barabashov discussed results of Mars photometry which
                    were conducted by him in the Khar'kov observatory with
                    the assistance of I.K. Koval'.
Card 1/4

From the Council of Astronomers. Transactions   SOV/30-58-8-21/43
of the Plenary Meeting of the Committee of Planetary Physics

K.I. Kozlova   ⎫ communicated some results of Mars photo-
Yu.V. Glagolevskiy ⎬ metry which was carried out by the Sektor
                      astrobotaniki Akademii nauk Kazakhskoy SSR
                      (Department of Astrobotany AS Kazakh USSR).
A.H. Suslov spoke on the intensity of tellurium lines.
N.P. Barabashov ⎫ reported on results of spectrophotometry
V.I. Yezerskiy ⎬ obtained in the **observatory of Crimea.**
A.T. Chekirda   ⎭
N.D. Kalinenkov reported on spectrophotometric measurements
     of details of the surface of Mars which were conducted in
     Kazan'.
B.A. Bronshten   ⎫ reported on results of photographic photo-
O.B. Rzhanitsyna ⎭ metry of the bright region Argir on Mars.
M.M. Butelava ⎫ reported on the first utilization of electron-
A.A. Kalinyak ⎬ optical transducer in photographing Mars in the
L.A. Kamionko ⎭ Pulkovo observatory.
V.V. Sharonov reported on most recent Mars research in foreign
     countries.
N.P. Barabashov spoke about problems and methods of lunar re-
     search.

Card 2/4

From the Council of Astronomers. Transactions   SOV/30-58-8-21/43
of the Plenary Meeting of the Committee of Planetary Physics

B.Yu. Levin ⎫ spoke about results of the theoretical inves-
S.V. Mayeva ⎭ tigation of the thermal history of Mars and the
      moon.
B. Yu. Levin spoke about the history of the motion of the
    moon and about geological properties of its material.
V.V. Sharonov, Professor, read the paper by N.N. Sytinskaya
    on the development and the confirmation of the hypo-
    theses concerning the nature of the surface layers of
    the moon.
A.V. Markov reported on the equipment in Pulkovo for thermo-
    electrical temperature measurements of narrow strips of
    the surface of the moon.
Yu.N. Chistyakov communicated the first results of research
    with this equipment.
N.N. Kaydanovskiy spoke about prospects in the investigation
    of thermal radiation from the moon (based upon observa-
    tions by Ye.K. Kokhan in the Abastumari observatory).
N.P. Barabashov ⎫ reported on preliminary results of the in-
I.K. Koval'   ⎭ vestigation of the polarization of the moon

Card 3/4

From the Council of Astronomers. Transactions   SOV/30-58-8-21/43
of the Plenary Meeting of the Committee of Planetary Physics

                        by means of light filters.
Yu.N. Lipskiy spoke about the necessity of taking into con-
        sideration the variations in the degree and the direction
        of polarization of moon details, when they are spectro-
        photographed simultaneously.
T.A. Polozhentseva ⎫ reported on the determination of color
V.G. Teyfel'   ⎪ contrasts on the surface of the moon by
A.N. Sergeyeva   ⎬ means of photographic spectrophotometry.
N.P. Barabashov   ⎪
V.I. Yezerskiy   ⎪
V.A. Fedorets   ⎭

Card 4/4

Chekirda, A. T.

PHASE I BOOK EXPLOITATION   SOV/4302

Akademiya nauk SSSR. Komissiya po fizike planet

Izvestiya, vyp. 1 (News of the Commission on the Physics of Planets, No. 1)
    Khar'kov, 1959. 108 p. 1,000 copies printed.

Editorial Board: N.P. Barabashov, Academician of the Academy of Sciences
    Ukrainskaya SSR (Resp. Ed.); V.I. Yezerskiy, Candidate of Physics and
    Mathematics (Secretary); A.V. Markov, Professor; Yu. N. Lipskiy, Candidate of
    Physics and Mathematics; and A.T. Chekirda, Candidate of Physics and Mathematics;
    Ed.: D.A. Vaynberg; Tech. Ed.: A.S. Trofimenko.

PURPOSE: This publication is intended for astrophysicists and astronomers.

COVERAGE: This collection of articles constitutes the first issue of a new journal
    on problems in planetary physics. The first six articles discuss the surface
    features, polarimetry, and spectrophotometry of the Moon. The remaining articles
    deal with the physics of Mars, Jupiter, and the asteroids. No personalities are
    mentioned. References accompany individual articles.

Card 1/3

News of the Commission (Cont.)   SOV/4302

TABLE OF CONTENTS:

Card 2/3

News of the Commission (Cont.)   SOV/4302

Koval', I.K. The Degree of Smoothness of the Martian Continents
and Seas   85

Teyfel', V.G. Intensity Distribution on Jupiter's Disk in the Bands
of Methane Absorption   93

Mayeva, S.V. Thermal History of Asteroids   105

AVAILABLE: Library of Congress

Card 3/3   JA/dvm/mas
                                                                     10-10-60

BARABASHOV, N.P.; KOVAL', I.K.; CHEKIRDA, A.T.

Some results of the photometry of cloud formations on Mars.
Izv.Kom.po fiz.plan. no.2:36-40 '60.   (MIRA 14:3)
                    (Mars (Planet))

S/751/61/000/008/001/005

AUTHORS: Barabashov N. P., Koval', I. K., Chekirda, A. T.

TITLE: Photometric Investigations of Mars in 1958.

SOURCE: Akademiya nauk SSSR. Komissiya po fizike planet. Izvestiya. no. 3.
          Kharkov, 1961. 3 - 15.

TEXT: Data are presented on the distribution of brightness along the inten-
sity equator and central meridian of Mars, obtained on the basis of photographic
observations of the planet using optical filters. The emulsions and filters
employed are listed, and the exposures stated. No tie-in was made with the
sun, since the epxeriment was not aimed at obtaining a detailed list of absol-
ute brightnesses. All negatives were calibrated with a tubular photometer
and measured with a MF-2 microphotometer. Data on the contrast between the
bright and dark regions, and on the variation of the brightness of the north-
ern and southern polar regions of Mars, are tabulated. Except for one longitude
region, satisfactory correlation is observed between the "red" and "blue" cur-
ves, and the lack of correlation in the particular region is attributed to the
specific distribution of the energy in the spectrum of the corresponding seas

Card 1/2

Photometric Investigations of Mars....   S/751/61/000/008/001/005

of Mars, with the "blue atmospheric haze playing a secondary role. There are
5 tables.

ASSOCIATION: Astronomicheskaya observatoriya Khar'kovskogo universiteta
             (Astronomical Observatory of the Kharkov University)

Card 2/2

S/035/62/000/009/002/060
A001/A101

AUTHOR: Chekirda, A. T.

TITLE: The Sixth plenum of the Commission for the Physics of Planets at the
             Astronomical Council, AS USSR

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 9, 1962, 7,
             abstract 9A33, ("Izv. Komis. po fiz. planet", 1961, no. 3, 96 - 99)

TEXT: The plenum of the Commission was held at Khar'kov on October 24 - 27,
1960. The reports dealt with the results of processing the first photographs of the
Moon's back side (N. P. Barabashev, Yu. N. Lipskiy, D. Ye. Shchegolev, etc.), results
of lunar studies by radio methods (N. L. Kaydanovskiy. A. Ye. Salomonovich), photo-
metric, polarization and other methods (V. V. Sharonov, V. G. Teyfel', V. P. Dzha-
piashvili, etc.), as well as theoretical investigations (B. Yu. Levin, Ye. L. Rus-
kol). Several reports dealt with studies of Mars, Venus and Saturn.

                                              L. R.

[Abstracter's note: Complete translation]

Card 1/1

CHEKIRDA, A.T.

Plenum of the Committee on Planetary Physics of the Astronomical
Council of the Academy of Sciences of the U.S.S.R. Astron.zhur. 38
no.3:571-573 My-Je '61.   (MIRA 14:6)
                        (Planets)

Chekirda, A. Z.

AUTHOR: Chekirda, A. Z.   49-7-12/14

TITLE: On the hydrodynamic theory of the centres of activity in
         the atmosphere. (K gidrodinamicheskoy teorii tsentrov
         deystviya atmosfery).

PERIODICAL: Izvestiya Akademii Nauk,SSSR, Seriya Geofizicheskaya,
         1957, No.7, pp.954-958 (USSR)

ABSTRACT: From the point of view of meteorology, the steady state
         disturbances of the zonal circulation, the "centres of
         activity" of the atmosphere, are of interest which occur as
         a result of non-uniform heating of the mainlands and the
         oceans during summer or winter. The hydrodynamic theory of
         centres of activity was first expounded by Ye. N. Blinova
         (Ref.1); in solving the problem of long term forecasting
         of the pressure, temperature and wind at a medium level,
         Blinova also solved the steady state problem. One of the
         equations is that of changing the speed vortex of Friedman,
         projected onto a vertical axis. The solution is sought for
         a west-east transfer in the form of developing of the
         function of the current into series by means of spherical
Card 1/2 functions, assuming that the pressure, temperature and
         density are independent of the altitude. However, one of
         the important features of the atmosphere is that these

On the hydrodynamic theory of the centres of activity in
the atmosphere. (Cont.)

values are dependent on the altitude. In later work (Ref.2)
Blinova reduced the problem to solving the following equation:

$$a_1 \Delta_\varphi + 2\omega\varphi = F(\theta,\lambda)$$

Card 2/2   and the solution of this equation was applied by the author
of this paper for calculating the atmospheric pressure at
sea level. The results of his calculations are plotted in
the chart, Fig.2, p.957, and it can be seen that they are in
good agreement with the real distribution plotted in the
chart, Fig.1 and this indicates that,in spite of the applied
simplifying assumptions, the calculations can be of interest.
There are 2 figures and 2 Slavic references.

SUBMITTED: January 22, 1957.

ASSOCIATION: Central (Weather) Forecasting Institute.
        (Tsentral'nyy Institut Prognozov).

AVAILABLE: Library of Congress

CHEKIRDA, A.Z.

Considering the relationship between the speed of the zonal stream
and latitude in numerical prediction of the current function field
at a mean atmospheric level. Izv. AN SSSR. Ser. geofiz. no.11:
1692-1705 N '61.   (MIRA 14:11)

1. Akademiya nauk SSSR, Ob"yedinennyy meteorologicheskiy vychislitel'-
nyy tsentr.
                    (Numerical weather forecasting)

ACCESSION NR.: AT4034676   S/0000/64/000/000/0075/0098

AUTHOR: Chekirda, A. Z.

TITLE: Forecasting the heights of an isobaric surface of the mean level of the
atmosphere, taking into account the real profile of zonal flow velocity

SOURCE: AN SSSR. Ob"yedinenny*y meteorologicheskiy vy*chislitel'ny*y tsentr.
Gidrodinamicheskiy dolgosrochn*y prognoz pogody* (Hydrodynamic long-range weather
forecasting). Moscow, Izd-vo "Nauka", 1964, 75-98

TOPIC TAGS: meteorology, zonal flow, flow velocity profile, atmospheric pressure,
atmospheric neutral wave, weather forecasting, long-range weather forecasting

ABSTRACT: The principal content of this paper is an investigation of the influ-
ence of the real profile of zonal flow on the development of processes at the mean
level of the atmosphere. In this study it was found that pressure formations
having a greater extent along a meridian than along a circle of latitude are de-
formed slowly by zonal flow and in the course of a certain fixed time, almost
without changing configuration, are carried along in this flow. Pressure forma-
tions having a greater extent along a circle of latitude than along a meridian do
not persist long and under the influence of zonal flow are broken down into small
centers. The lifetime of pressure formations can be determined qualitatively
Card 1/2

ACCESSION NR.: AT4034676

from the configuration of a particular pressure formation. The character of the zonal profile determines the rate of movement of pressure formations. Pressure formations move at different velocities in dependence on the character of the zonal profile. The exchange of energy between waves of different kinds is related closely to the character of the zonal profile. The stronger the curvature of the zonal profile, the stronger is the energy exchange. Neutral waves are not present in the atmosphere when there is a real zonal profile. An allowance for the real zonal profile in numerical forecasting of nonzonal deviations of the heights of the 600-mb surface leads to a substantial improvement in the results. The problem of forecasting the zonal profile therefore is considered of the greatest importance. Orig. art. has: 18 formulas, 21 figures and 4 tables.

ASSOCIATION: Ob"yedinenny*y meteorologicheskiy vy*chislitel'ny*y tsentr AN SSSR (Joint Meteorological Computation Center AN SSSR)

SUBMITTED: 22Nov63   DATE ACQ: 16Apr64   ENCL: 00

SUB CODE: ES   NO REF SOV: 002   OTHER: 004

Card 2/2

L 11349-65   FSF(h)/FSS-2/EWT(1)/FS(v)-3/FCC/EWG(v)   Po-4/Pe-5/Pq-4/Pae-2/
Pi-4   TT/GW

ACCESSION NR: AT4046060   S/2531/64/000/166/0189/0202

AUTHOR: Musayelyan, Sh. A.; Chekirda, A. Z.   B

TITLE: Numerical interpretation of cloud data transmitted by meteor-
ological satellites

SOURCE: Leningrad. Glavnaya geofisicheskaya observatoriya. Trudy*,
no. 166, 1964. Voprosy* interpretatsii danny*kh meteorologicheskikh
sputnikov (Problems in the interpretation of data of meteorological
satellites), 189-202

TOPIC TAGS: vertical air current, cloud distribution, meterological
satellite cloud data

ABSTRACT: A mathematical method is proposed for determining the field
of vertical currents from cloud distribution data obtained from
meteorological satellites. The method is based on the premise that
the decisive factor in the formation of clouds is the presence of
vertically rising currents, and that in the presence of descending cur-
rents, no new clouds are formed and those already in existance start to

Card   1/2

L 11349-65
ACCESSION NR: AT4046060

break up. The accuracy of the results obtained with the proposed
method depends not only on the validity of the method but also on the
quality and quantity of the initial data used to compute the basic
values of the coefficients of linear relationships. Orig. art. has:
13 figures and 9 formulas.

ASSOCIATION: Glavnaya geofizicheskaya observatoriya (Main Geophysical
Observatory)

SUBMITTED: 00   ATD PRESS: 3118   ENCL: 00

SUB CODE: ES   NO REF SOV: 001   OTHER: 000

Card 2/2

L 10970-67   FSS-2/EWT(1)   DD/GD

ACC NR: AT6036587   SOURCE CODE: UR/0000/66/000/000/0214/0215

33

AUTHOR: Kolosov, I. A.; Chekirda, I. F.; Lebedev, V. I.; Khlebnikov, G. F.;
Kas'yan, I. I.

ORG: none

TITLE: Rotation tests as a method of detecting covert forms of motion sickness
under conditions of weightlessness [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, 214-215

TOPIC TAGS: weightlessness, biologic acceleration effect, coriolis acceleration,
motion sickness, diagnostic medicine, vestibular analyzer

ABSTRACT: Some Soviet cosmonauts (G. S. Titov, V. V. Nikolayeva-Tereshkova,
K. P. Feoktistov, B. B. Yegorov) with adequately high vestibular analyzer
resistance to motion sickness experienced vestibulo-autonomic discomfort
under conditions of prolonged weightlessness. In this connection, the prob-
lem of exposing people suffering from vestibular disorders assumes the
greatest significance. An attempt to identify latent forms of motion sick-
ness more completely was undertaken.

Card 1/4

L 10970-67

ACC NR: AT6036587

The methodological approach consisted of a modified Barani rotational test (10 rotations for 10 sec) during horizontal flight in a jet aircraft and during conditions of weightlessness (25 sec). During the first stage, the rotational test was conducted during the five sec after the beginning of stabilized weightlessness. In the second stage, the same people were rotated at the beginning of the transition period from 2 G to 0 G for 5 sec and then for an additional 5 sec during the beginning of weightlessness.

Examinations were conducted on male subjects aged 23—45 with high vestibular resistance to motion sickness under terrestrial conditions and high tolerance of weightlessness during flights.

Three basic components of the vestibular analyzer were studied:
1. somatic (duration of postnystagmus)
2. autonomic (pulse rate, perspiration, skin color)
3. sensory (subjective illusions, illusions of counterrotation).

It was revealed that 18. 2% of the subjects had latent forms of motion sickness during rotational tests under conditions of stabilized weightlessness. In this group, the duration of counterrotational illusion was prolonged, as was postrotational nystagmus by 2—5 sec compared to horizontal flight

Card 2/4

L. 10070-67
ACC NR: AT6036587

data, paleness or redness of facial skin was apparent, and moderate hyper-
hydrosis was noted as were illusions of changed body position with the eyes
closed. Increased salivation and worsened subjective feelings were also
noted.

Vestibulo autonomic discomfort was not observed in the remainder of
subjects. The duration of counterrotational illusion and postrotational
nystagmus was shortened by 4—6 sec in the majority of subjects, while in
others. these indices were not shortened.

At the beginning of rotation in the period of transition from positive G
to weightlessness during the second stage, tolerance of angular accelera-
tions during stabilized weightlessness revealed 22. 2% more cases of latent
motion sickness. In these subjects, the duration of counterrotational illu-
sions increased as compared to their duration during stabilized weightless-
ness; pronounced paleness of facial skin, lip cyanosis, pronounced, general
hyperhydrosis, nausea, hypersalivation, and discomfort in the area of the
stomach were observed. The termination of nystagmus could not be fixed
relative to the onset of accelerations following weightlessness.

In the opinion of the authors, symptoms of motion sickness during ro-

Card 3/4

L 10970-57

ACC NR: AT6036587   O

tational tests under conditions of stabilized weightlessness were found for
the following reasons: first, under conditions of weightlessness the function
of the otolithic component of the vestibular apparatus was modified due to
the unusual position of the otoliths (floating state) which led to increased
sensitivity to angular accelerations during rotation of the chair; second,
manifestations of Coriolis accelerations as a result of Barani chair rotation
during parabolic flight.

   In those cases when the rotational test was completed in the period of
transition from acceleration to weightlessness, additional adequate irrita-
tion of the otoliths associated with a sharp switch from a "plus" stimulus
to a "minus" took place, facilitating the more rapid accumulation of Coriolis
accelerations.

   Therefore, the use of a modified rotational test under short-term weight-
lessness conditions reveals latent forms of motion sickness even in people
with high resistance and can be used for prognostic purposes.

   Use of the rotational test in the period of transition from acceleration
to weightlessness reveals latent forms of motion sickness most effectively.
[W.A. No. 22; ATD Report 66-116]
SUB CODE:, 06 / SUBM DATE: 00May66 .

L 43979-66   EWT(1)/FSS-2   'DD

ACC NR: AP6029423   SOURCE CODE: UR/0177/66/000/008/0060/0062

L/4

AUTHOR: Khilov, K. L. (Professor); Kolosov, I. A. (Major, Medical corps); Lebedev,
V. I. (Lieutenant colonel, Medical corps); Chekirda, I. F. (Senior lieutenant, Medical
corps)

ORG: none

TITLE: Changes in acceleration sensitivity thresholds under conditions of brief
weightlessness

SOURCE: Voyenno-meditsinskiy zhurnal, no. 8, 1966, 60-62

TOPIC TAGS: weightlessness, acceleration biologic effect, space physiology, human
physiology, acceleration tolerance, vertibular training, vestibular analyzer

ABSTRACT: A preliminary step of this investigation involved determining a trend in
acceleration sensitivity shifts during brief weightlessness (parabolic flights).
After determining the sensitivity of the vestibular analyzer, the following method
of judging the sensitivity of the horizontal semicircular canals to angular accelera-
tions was employed: A subject was fixed in a Barany chair with head inclined forward
30° and eyes closed. At first, the chair was rotated at a rate of 180° per 20 sec.
If a sensation of rotation did not occur, the chair was then rotated through 360°
for 20 and 15 sec with a 3—5 min interval. Only positive acceleration sensitivity
thresholds were considered and stopping sensations were neglected. The chair was

Card 1/3   UDC: 612.886-06:629.19

L 43979-66

ACC NR: AP6029423

rotated manually by a physician. In a few cases, electronystagmograms were recorded.
When a subject sensed acceleration, he informed the physician who fixed the onset
time with a stop watch. Background data were gathered during normal horizontal flight.
Rotation commenced 5 sec after the beginning of weightlessness. The duration of
weightlessness periods was 24—26 sec. Before and after weightlessness, head-pelvis
forces of 1.8 and 2.0 G lasting 10—12 sec were experienced. Eleven males aged
23—45 were studied and a total of 24 experiments were run. Of this number, three
subjects were exposed to weightlessness once, five were exposed twice during a
single flight, and six were exposed from two to six times in the course of 2—3
flights. Analysis of the data from weightlessness runs revealed a shift in the
threshold sensitivity of the horizontal semicircular canals to angular accelerations.
In every case there was an increase in the duration of the rotational time necessary
to obtain a threshold sensation which indicated decreased excitability of canal
receptor formations. In 4 subjects, rotation sensation occurred at the 15th and 16th
sec at a rate of 180° per 20 sec in horizontal flight; at the same rate during
weightlessness no threshold sensation was observed. In one subject, a rate of 360°
per 20 sec brought on a rotational sensation after 12 sec while during weightlessness
no sensation occurred. In the remaining subjects, the time necessary to induce a
manifestation of rotational sensation during weightlessness was increased by 3—11
sec compared to control data taken during horizontal flight. The average elapsed
time necessary to evoke threshold rotational sensation increased by 1.7 compared
with average background (horizontal flight) values. It was concluded that brief
weightlessness following positive accelerations leads to an increase in acceleration
sensitivity thresholds. These increases are apparently due to the elimination of the

Card 2/3

L 43979-66

ACC NR: AP6029423

activating influence of otoliths on sensory reactions of the semicircular canals
as a result of a "loss" of otolith weight.
[CD]

SUB CODE: 06/   SUBM DATE: none/   ATD PRESS: 5071

Card 3/3 ULR

30273

S/035/61/000/010/027/034
A001/A101

3.1550 (1044, 1057)

AUTHORS: Barabashov, N.P., Koval', I.K., Chekirda, I.T.

TITLE: Some results of photometry of cloudy formations on Mars

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no. 10, 1961, 66, ab-
             stract 10A457 ("Izv. Komis. po fiz. planet", 1960, no, 2, 36-40)

TEXT: Blue clouds observed mainly in the equatorial zone of the planet
are described on the basis of photographs taken in 1958 by means of a 10" reflec-
tor of the Khar'kov Observatory with the equivalent focus equal to 15.3 m in
ultraviolet ($\lambda 3600$) and blue ($\lambda 4200$) portions of spectrum. The existence of
a photometric scale makes it possible to obtain the curves of brightness dis-
tribution along the equator of intensity, when the clouds are present and at
their absence. The analysis of materials has shown that the presence of clouds
on the disk and terminator does not depend on the albedo of the underlying solid
surface of Mars. The value of cloud-background contrasts, and the albedo of the
clouds on the terminator are higher than on the disk. On an average, the bright-

Card 1/2

Some results of photometry ...

S/035/61/000/010/027/034
A001/A101

ness of clouds exceeds the background brightness by 14%. On assumption that the clouds studied are analogous, in their nature, to cirrus clouds of the Earth's atmosphere, their thickness was estimated to be 3 - 6 m.

[Abstracter's note: Complete translation]

I. Lebedeva

Card 2/2

L 17448-63   EPA/EPR/EPF(c)/EWT(m)/BDS   AFFTC/AFGC   Pae-4/Ps-4/Pr-4
BW/RM/WW/JW/DE/JWD/H
ACCESSION NR: AP3006130   S/0207/63/000/004/0099/0101

AUTHOR: Bobolev, V. K. (Moscow); Chekirda, L. F. (Moscow); Chuyko, S. V.
(Moscow)

TITLE: Transition to detonation during normal burning of porous explosives at
slightly increasing pressure

SOURCE: Zhurnal prikladnoy mekhaniki i tekhnicheskoy fiziki, no. 4, 1963,
99-101

TOPIC TAGS: solid explosive, secondary explosive, combustion, deflagration-
detonation transition, hexogen, solid-propellant detonation

ABSTRACT: Experiments have shown that the pores on the burning surface of melt-
ing secondary explosives are covered by the melt only at comparatively low pres-
sures. When the pressure reaches a critical value (P_*), the surface of the melt
is disrupted and intermediate gaseous combustion products from the dark zone
penetrate into the pores, where they cause thermal decomposition of the ex-
plosive. After an induction period the intermediate products enriched by the
thermal decomposition products undergo self-ignition followed by detonation.

Card 1/3

L 17448-63
ACCESSION NR: AP3006130   2

Flames inside the pores are not observed when the pore walls are coated with
an inert material. Experiments with pressed hexogen of 160—250-μ particle
size and 0.7 density were conducted in a manometric bomb equipped with high-
and low-speed photoregisters and with piezoelectric pressure pickups for re-
cording the pressure in the bomb and in the pores. The pressure P_* can be
calculated by the formula

$$P_*^n \leqslant \frac{12\,\delta\chi(\rho - \rho_*)}{(1 - \delta)D\rho};$$

where ρ_* is the density of the melt, ρ is the density of the solid explosive,
χ is the thickness of the molten layer at 1 atm, and D is the particle diam-
eter; P_* was about 3 atm for the hexogen tested. A plot of detonation pres-
sure (P) versus the pressure-increase rate obtained with hexogen specimens
40 mm high and 8 mm in diameter showed that the characteristic time constant,
the time required for development of self-ignition, is about 0.7 sec. Four
combustion regimes (normal, convective, explosive, and detonative) are defined
by inequalities in terms of the rate of gas penetration into the pores and the

Card 2/3

L 17448-63
ACCESSION NR: AP3006130   2

flow velocity of the combustion products. "The authors thank I. A. Karpukhin
and G. A. Afanas'yev for evaluating certain problems." Orig. art. has: 5
figures and 1 formula.

ASSOCIATION: none

SUBMITTED: 18Mar63   DATE ACQ: 11Sep63   ENCL: 00

SUB CODE: AS, FL   NO REF SOV: 002   OTHER: 003

Card 3/3

L 16204-63   EPR/EPF(c)/EWT(m)/BDS   AFFTC   Ps-4/Pr-4   RM/BW/WW/
JW/JWD/H

ACCESSION NR: AP3006345   S/0258/63/003/003/0460/0467

AUTHOR: Margolin, A. D. (Moscow); Chekirda, L. P. (Moscow); Chuyko,
S. V. (Moscow)

TITLE: The combustion stability of liquid explosives at constant
pressure

SOURCE: Inzhenerny*y zhurnal, v. 3, no. 3, 1963, 460-467

TOPIC TAGS: combustion stability, combustion instability, liquid
explosive, propellant, stability analysis, liquid fuel, nitroglycol,
instability mode, combustion

ABSTRACT: A comprehensive theoretical and experimental study of com-
bustion stability is presented. An analysis is made of combustion in
an infinite vessel based on L. D. Landau's general theory on the com-
bustion stability of liquid explosives (K teorii medlennogo goreniya.
Zh. eksperim. i teoret. fiziki, v. 14, no. 4, 1944), and the follow-
ing formulas are derived for determining the dimensionless wave num-
ber of dangerous oscillations (x_n) (those which develop most rapidly)
and the time required for their development (τ_n):

$$x_n = 4/3n^2; \text{ and } 1/\tau_n = 1.5 \ (gn^3/J_1)\sqrt{\rho_1\rho_2}*,$$

Card 1/8

L 16204-63
ACCESSION NR: AP3006345

3

$$n \propto (J/J_1)\sqrt{\frac{\rho_1^*}{\rho_2}} \ , \ J = \rho_1 v_1 \ \text{(the mass burning rate),}$$

and $J_1 = \rho_2^* v_2^*$ (the critical mass burning rate). The region in which oscillations are amplified was defined by inequalities in terms of n and x. The values of $\tau_n \lambda_n$ and x_n were calculated for nitroglycol and tabulated in the range of $n = 1 - 2$. A plot of x versus n is shown in Fig. 1 of the Enclosure. Experiments with nitroglycol were conducted in tubes (1.5—10mm diameter) and in rectangular vessels (2 x 10 mm). To secure uniform ignition along the entire surface, nitroglycol was ignited by a layer of steadily burning ethylnitrate placed over the nitroglycol and ignited by a nichrome wire. The time of development of unstable combustion of nitroglycol was less than 0.1 sec. The effects of the tube diameter and the shape of the vessel on combustion stability were also studied. Some of the results are shown in Fig. 2 and Fig. 3 of the Enclosure. Fig. 3 shows that in tubes of small diameter the largest possible perturbations will be the most dangerous while in tubes of large diameter the most dangerous will be perturbations having the highest values of i. Further analysis yielded criteria for the effect of

Card 2/63

L 16204-63
ACCESSION NR: AP3006345

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gravitation on combustion stability. Stability at zero gravity is discussed. On the basis of photographs obtained by high-speed frame photography, it is shown that flame pulsations arise as a consequence of perturbations of the liquid surface. Both radial and tangential instability modes were distinguished. The wave length of the oscillations was evaluated as 2—8 mm, which lies within the range of dangerous oscillations predicted by theory. Measurements of flame pulsations indicated that their frequency increases somewhat with increasing pressure. Photographs of nitroglycol dyed with nigrosine showed helical traces and cellular patterns resembling those observed with spinning detonation waves. It may be assumed that the dimension of the surface perturbation during unstable combustion equals the dimension of the most dangerous oscillation predicted by stability analysis. Orig. art. has: 6 figures and 17 formulas.

ASSOCIATION: none

SUBMITTED: 16Oct63   DATE ACQ: 27Sep63   ENCL: 003

SUB CODE: AS, PR   NO REF SOV: 004   OTHER: 001

Card 3/6

CHEKIROV, T.Ch.

Undulant variations of intracisternal pressure in the goat udder.
Izv. AN Kir. SSR, Ser. biol. nauk 3 no.2:83-90 '61.   (MIRA 14:12)
                        (UDDER)

CHEKIROV, T.Ch.

Effect of acetylcholine on the motor function of the mammary gland
in goats. Izv. AN Kir. SSR. Ser. biol. nauk 3 no.2:91-96 '61.
         (CHOLINE)   (UDDER—INNERVATION)

CHEKLINA, Ye.A.

Characteristics of rocks in the Murgab Delta from the point of
view of engineering geology. Vop. gidrogeol. i inzh. geol. no.17:
86-91 '59.   (MIRA 14:1)
        (Murgab Delta region (Turkmenistan)--Rocks)
          (Murgal Valley (Turkmenistan)--Rocks)

DUBROVKIN, V.L.; CHEKLINA, Ye.A.

Characteristics of Quaternary sediments in the central part of
the Amu Darya Valley (from Kelif station to Deynau) from the
point of view of engineering geology in connection with the
construction of irrigation systems. Vop.gidrogeol.
i inzh.geol. no.19:59-71 '61.   (MIRA 15:2)
            (Amu Darya Valley--Engineering geology)
            (Amu Darya Valley--Irrigation)

VEREYSKIY, N.G.; DUBROVKIN, V.L. [deceased]; PAVLOV, B.S.; CHEKLINA, Ye.A.

Principles of mapping on a scale of 1:50,000-1:25,000 for purposes of engineering geology in connection with industrial urban, rural, and resort construction. Sov. geol. 6 no.10: 109-113 0 '63.   (MIRA 17:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii.

DUBROVKIN, V.L.[deceased]; CHEKLINA, Ye.A.; VINOGRADOVA, Ye.A.;
    TSAREVA, A.M.; POPOV, V.V., prof., red.

    [Engineering geology characteristics of loess in the Kursk
    Magnetic Anomaly] Inzhenerno-geologicheskaia kharakteristi-
    ka lessovykh porod territorii KMA [By] V.L.Dubrovkin i dr.
    Moskva, Nedra, 1964. 198 p.   (MIRA 18:2)

    1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut
    gidrogeologii i inzhenernoy geologii.

CHEKLOVICH, V.D., and SOLOV'YEV, M.N.

Age of the Metamorphic Rocks in the North Nura-Tau Range (resume in Uzbekistani). Dokl. AN Uzb. SSR, No 8, 1953, 28-29

The metamorphic rocks, considered early paleozoic and familiar from the many pits dug in the north slope of the Nura-Tau, are represented by quartz-mica, chlorite-epidote, silicified and encrusted rocks, quartz-actinolite hornstones (charts), paragneiss, etc. They are observed in a definite zone of action of small intrusives and hydrothermal processes. (RZhGeol, No 1, 1954)

SO: W-31128, 11 Jan 55

CHEKLYUK, E. F.

Subject   : USSR/Engineering

AID - P-191

Card   : 1/1

Authors   : Cheklyuk, E. F., Organov, K. A., Stepanchikov, E. A. and Snarskiy, A. N.

Title   : Thermal Treatment of Exhausted Oil Strata (Part II)

Periodical   : Neft. khoz., v. 32, #2, 33-38, F 1954

Abstract   : The heat injection process is discussed with graphical and analytical representation of heat losses in the stratum and vertical wall of the well. The example computation shows that the practical application of the process depends upon the minimum temperature ($200^{\circ}C$) and pressure (80 atm) of the injected medium. 3 charts.

Institution : None

Submitted   : No date

BRANTSEVICH, L.G. [Brantsevych, L.H.]; CHEKMACHOVA, V.V.

Effect of Azotobacter on the change of the content of nitrogen
compounds in fodder beets. Visnyk Kyiv. un. no.5. Ser. biol.
no.1:64-68 '62.   (MIRA 16:5)
   (AZOTOBACTER)   (NITROGEN METABOLISM)   (BEETS)

CHEKMAREV, A.

De not dissipate funds among many objectives. Prem. keep. 12
no.10:39 0 '58.   (MIRA 11:10)

1. Starshiy inzhener upravleniya kapital'noge streitel'stva
Respremsoveta.
                    (Altai Territery--Building)

CHEKMAREV, A., podpolkovnik; BURMISTROV, V., leytenant

Accelerated method for blowing up a bridge. Voen. vest. 42
no.8:100-101 Ag '62.   (MIRA 15:7)
                    (Demolition, Military)

CHEKMAREV, A.A.

System of allowances for diameters of coaxial elements in
superhigh-frequency transmission lines. Standartizatsiia 25
no.12:23-38 D '61.   (MIRA 14:11)
                    (Electric lines)
                    (Tolerance(Engineering))

CHEKMAREV, A.A.

Calculating tolerances for the heater of devices with a given
durability. Standartizatsiia 28 no.2:27-30 F '64.

(MIRA 17:3)

CHEKMAREV, A.A.

Functional interchangeability in the manufacture of electronic
instruments. Standartizatsiia 28 no.8:3-9 Ag '64.

(MIRA 17:11)

CHEKMAREV, A.A.

Functional interchangeability in the manufacture of electric vacuum devices. Vzaim. i tekh. izm. v mashinostr.: nauch.-tekh. sbor. no.4:331-354 '64.   (MIRA 18:1)

CHEKMAREV, A.I.

Čekmarev, A. I. The influence of a constant force on the oscillations in nonlinear systems. Akad. Nauk SSSR. Inženernyi Sbornik 4, no. 2, 80–108 (1948). (Russian)

This is an investigation of the forced oscillations of a system $\ddot{q} + f(q) = p + h \sin \omega t$ where p and h are constants. The author seeks an approximate solution of the form $q = b + a \sin \omega t$ and obtains relations for a, b from the variational equation

$$\int_0^{2\pi} [-\omega^2 a \sin z + f(q) - p - h \sin z][\delta b + \delta a \sin z]\,dz = 0.$$

Applications are made, with extensive detailed calculations to several special characteristics of restoring force $f(q)$, notably $f(q) = cq^3$, and $f(q)$ represented by three broken lines behaving together like q^3. Experimental verifications are also described.   S. Lefschetz (Princeton, N. J.).

Source: Mathematical Reviews,   Vol 14 No. 7

CHEKMAREV, A.I.

K voprosu o raschete krutil'nykh kolebanii sistem s maiatnikovymi antivibratorami.
(In: Serensen, S V. Dinamika i prochnost'kolenchatykh valov. Moskva, 1948. p.110-139, diagrs., bibliography)

Title tr.: Problem of calculation of torsional vibrations of systems with pendulum
antivibrators.

TJ182.S4

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress,
1955.

CHEKMAREV, A.L.

AMR

35

3788.   Chekmarev, A. L., **Nonlinear oscillations of anti-vibrators** (in Russian), Tekhnmy Sbornik, Akad Nauk SSSR 5, 1, 140-157, 1948.

Author treats the problem of torsional damping by means of pendulums. It is shown that the problem is expressible in terms of two nonlinear differential equations of the second order, one of which has an external periodic excitation. In these equations the coefficients of the second derivatives are trigonometric functions of dependent variables. Ritz's variational method is used to obtain the expression for the forced oscillation. This reduces the problem to a transcendental equation involving Bessel's functions J_0 and J_1 as well as parameters from which the equivalent moment of inertia of the antivibrator is computed. It is shown that this quantity is nearly constant for small oscillations and is a function of the amplitude for larger ones. In the latter case the method of continuous fractions, attributed to V. P. Terskikh, is applied. The method itself is not outlined in the paper.

N. Minorsky, France

Oct '51

METALLURGICAL LITERATURE CLASSIFICATION

1. KATS, A. M.: CHEKMAREV, A. I.

2. USSR (600)

4. Determinants

7. Calculation of "Gurvits(" determinants. Inzh.sbor., no. 12, 1952.

9. Monthly List of Russian Accessions, Library of Congress, _____April_____1953, Uncl.

BARABASHOV, Nikolay Pavlovich; KOVAL', Ivan Kirillovich; CHEKIRDA, A.T.,
     otv.red.; TRET'YAKOVA, A.N., red.; VAYNBERG, D.A., red.;
     TROFIMENKO, A.S., tekhred.

[Photographic photometry with light filters of Mars during the
favorable opposition in 1956] Fotograficheskaia fotometriia
Marsa so svetofil'tram vo vremia velikogo protivostoianiia v
1956 g. Khar'kov, Izd-vo Khar'kovskogo gos.univ. im. A.M.Gor'-
kogo, 1959. 529 p.   (MIRA 13:5)
          (Mars (Planet)--Opposition, 1956)
              (Photometry, Astronomical)

PHASE I BOOK EXPLOITATION   SOV/4657

Chebmarev, A. I., M. L. Mikhel', I. A. Krongauz, and Ye. M. Vitenberg

Tara dlya khimicheskikh produktov (Containers for Chemical Products)
Moscow, Nauchno-issl. in-t tekhniko-ekon. issled., 1960. 230 p.
2,000 copies printed.

Sponsoring Agency: Gosudarstvennyy komitet Soveta Ministrov SSSR po khimii.

Eds: I. A. Krongauz; S. I. Babushkina, and L. I. Khoras.

PURPOSE: This book is intended as a guide for all engineering, technical,
and planning workers concerned with the packing and shipping of chemical
products.

COVERAGE: The book discusses the design, manufacture, and utilization of
all types of containers for chemical products. It includes technical
data of a nature to permit the proper choice of a container in a given
situation. New types of containers developed in the Soviet Union, as
well as foreign experience, are described. The letter designations for

Card 1/5

Containers for Chemical Products

SOV/4657

all such containers are listed. No personalities are mentioned.
There are 50 references: 20 Soviet, 19 English, and 11 German.

TABLE OF CONTENTS:

Introduction

YAGODIN, G.A.; MOSTOVAYA, O.A.; CHEKMAREV, A.M.

Separating hafnium and zirconium by extracting their nitrates with the diisoamyl ester of methylphosphonic acid. Izv.vys.ucheb.zav.; khim.i khim tekh. 3 no.1:135-137 '60. (MIRA 13:6)

1. Kafedra tekhnologii radioaktivnykh, redkikh i rasseyannykh elementov Moskovskogo khimiko-tekhnologicheskogo instituta imeni D.I. Mendeleyeva.
                    (Hafnium)
                    (Zirconium)
                    (Chemical tests and reagents)

3

S/828/62/000/000/001/017
E039/E420

AUTHORS: Kaplan, G.Ye., Yagodin, G.A., Moiseyev, S.D.,
            Dmitriyeva, L.P., Mostovaya, O.A., Chekmarev, A.M.,
            Sevost'yanova, E.N., Udovenko, V.P.

TITLE: The separation of zirconium and hafnium by means of
            organophosphorous compounds, amines and other
            extraction agents

SOURCE: Razdeleniye blizkikh po svoystvam redkikh metallov.
            Mezhvuz. konfer. po metodam razdel. blizkikh po
            svoyst. red. metallov. Moscow, Metallurgizdat, 1962,
            28-41

TEXT: Although large separation coefficients can be obtained by
the use of mixed nitric and hydrochloric acids the process is not
favoured because of corrosion difficulties and the large quantity
of acids required.   The results of experiments on the extraction
of these elements from a sulphuric acid medium in the presence of
different extraction agents is therefore examined.   It is shown
that diisoamyl-ether-methylphosphonium acid (i $C_5H_{11}O)_2POCH_3$
(DAMPA) is a more powerful complex forming agent than
Card 1/2

3

The separation of zirconium ...   S/828/62/000/000/001/017
E039/E420

tributylphosphate (TBP).   The separation and distribution
coefficients for Zr and Hf are 24.6 and 3.2 respectively when
using 10% DAMPA in H_2SO_4 solution in the presence of thio-cyanic
acid, while for 40% TBP in the same medium the corresponding
coefficients are 21.6 and 2.6.   An increase in the concentration
of TBP is undesirable as it leads to increased viscosity and a
large loss of extraction agent.   It should be noted however that
the re-extraction of DAMPA is more difficult than for TBP.
Diphenylphosphoric acid extracts Zr and Hf from H_2SO_4 solution with
a separation coefficient 3 to 10.   Other extraction agents of
this type are also tested.   Tests are also made on the use of
tri-n-octylamine and in this case as the concentration of H_2SO_4 is
increased the separation coefficient for Zr and Hf passes through
a maximum value of 12 at about 1 normal H_2SO_4 and then falls to a
steady value of about 10 for further increase in the H_2SO_4
concentration.   Details are given of the constitution of the
organic and aqueous phases and the effect of acidity on the
separation coefficient.   There are 11 figures and 3 tables.

Card 2/2

S/830/62/000/002/002/002
D214/D308

AUTHORS: Yagodin, G.A. and Chekmarev, A.M.

TITLE: The extraction of zirconium and hafnium
                   by tri-n-octylamine from metal fluoride
                   solutions

SOURCE: Ekstraktsiya; teoriya, primeneniye,
                   apparatura, no. 2, Ed. by A.P. Zefirov
                   and M.M. Senyavin. Moscow, Gosatomizdat,
                   1962, 141 - 153

TEXT: The extraction of Zr and Hf from K_2MF_6
(where M = Zr, Hf) by a solution of pure tri-n-octylamine (TOA)
in benzene is discussed. TOA will extract Zr and Hf only from
weak acid solutions since more acid solutions tend to form
$R_3N.HX$ (where X = HSO_4, Cl, NO_3). Highest values for the dis-
tribution coefficients, D_{Zr} and D_{Hf}, were obtained with 0.2 M
H_2SO_4 while HNO_3 leads to the lowest D_M values. With H_2SO_4,
Card 1/2

The extraction of zirconium ...

S/830/62/000/002/002/002
D214/D308

$D_{Hf} > D_{Zr}$ but with HNO_3 Zr is preferentially extracted. The influence of additions was also studied. The values of D_M decrease as the concentration of the addition in the aqueous phase increases. With small additions of KCL of KF $D_{Hf} > D_{Zr}$ but at higher concentrations ($> 8g/l$ for KCl - $> 1\%$ for KF) $D_{Zr} > D_{Hf}$. Addition of K_2SO_4 make $D_{Zr} > D_{Hf}$ but with NH_4NO_3 $D_{Hf} > D_{Zr}$. Extraction from K_2ZrF_6 (10 g/l) acidified with 0.2 M $(COOH)_2$ by 5% benzene solution of TOA gives $D_{Zr} = 47$ and $D_{Hf} = 10$. Both D values decrease as the molarity of the acid is decreased. The extraction mechanism is summarized by: $2(R_3NH)HSO_{4org.} + K_2ZrF_{6aq.} \rightleftharpoons (R_3NH)_2ZrF_{6org.} + + 2KHSO_{4aq.}$. Evidence for this mechanism is discussed in detail.

There are 12 figures and 6 tables.

Card 2/2

CHEKMAREV, A.P.

S/137/61/000/005/022/060
A006/A106

AUTHORS: Chekmarev, A.P., Osada, Ya.Ye., Semenov, O.A.

TITLE: Some geometrical and kinematic peculiarities of cold pipe rolling
               processes on a pilger mill

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 5, 1961, 27, abstract 5D253
               ("Tr. Ukr. n.-i. trubn. in-ta", 1959, no. 1, 106 - 125)

TEXT: The authors analyze changes in the pipe walls along the instantane-
ous deformation seat and present an example of calculating the angle determining
the location of the section considered in the instantaneous deformation seat, the
least wall thickness (reduction) and other parameters. The authors determine
theoretically the rear boundary of the instantaneous deformation seat, and the
distribution of the metal flow rates in the direction of rolling along the in-
stantaneous deformation seat.

                                                          A. B.

[Abstracter's note: Complete translation]

Card 1/1

S/137/61/000/006/046/092
A006/A101

AUTHORS: Chekmarev, A.P., Rudoy, V.S., Chernyavskiy, A.A.

TITLE: Forward flow of metal during rolling on a pilger mill

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 6, 1961, 36, abstract 6D290
             ("Tr. Ukr. n.-i. trubn. in-ta", 1959, no. 1, 96 - 105)

TEXT: Forward flow during the rolling of 273 mm diameter pipes on a 6 -12"
pilger mill was determined from imprints left on the pipe and the pilger mill
head by apertures drilled in the rolls. The apertures of 10 mm diameter and 5 -
7 mm depth were drilled on every 15° (starting from the groove rims) over the
width, and on every 10° (from the beginning of the top) over the length of the
roll groove. It was established that the forward flow along the top of rolls
during rolling on a pilger mill was considerably higher than in longitudinal rol-
ling of pipes or compact sections in round grooves. The dependences of the coef-
ficient of forward flow on the turning angle of the rolls show that the forward
flow attains its highest value within 10° - 20° from the beginning of the top,
and then decreases. At the beginning of the top near the rims lagging was ob-
served. The width of this zone near the roll rims extends up to 45° over the

Card 1/2

Forward flow of metal during rolling on a pilger mill   S/137/61/000/006/046/092
                                                          A006/A101

groove width in the section of the metal outlet from the rolls. The coefficient
of forward flow first increases on the length of the polishing section (along the
initial 10° - 30°) and then decreases. To determine the coefficient of forward
flow with sufficient practical accuracy, the corresponding Yemel'yanov formula
may be employed.

                                                          Yu. Manegin

[Abstracter's note: Complete translation]

Card 2/2

CHEKMAREV, A.P., akademik; SMOL'YANINOV, A.F., inzh.; KLIMENKO, P.L., inzh.

Investigating pressure during rolling with variable radius rolls.
Izv. vys. ucheb. zav.; chern. met. 2 no.4:65-72 Ap '59.
(MIRA 12:8)

1.Dnepropetrovskiy metallurgicheskiy institut. 2.AN USSR
(for Chekmarev).
(Rolling (Metalwork)) (Deformations (Mechanics))