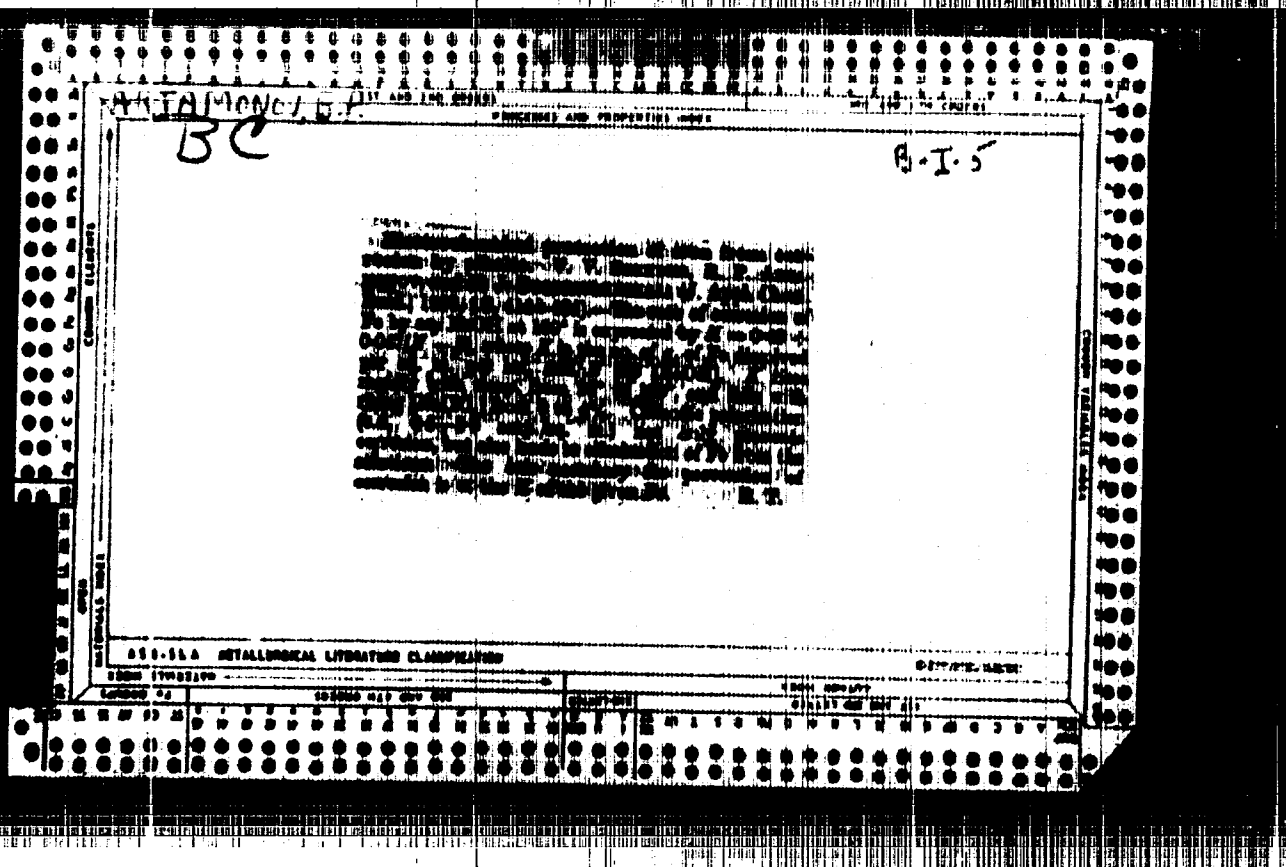
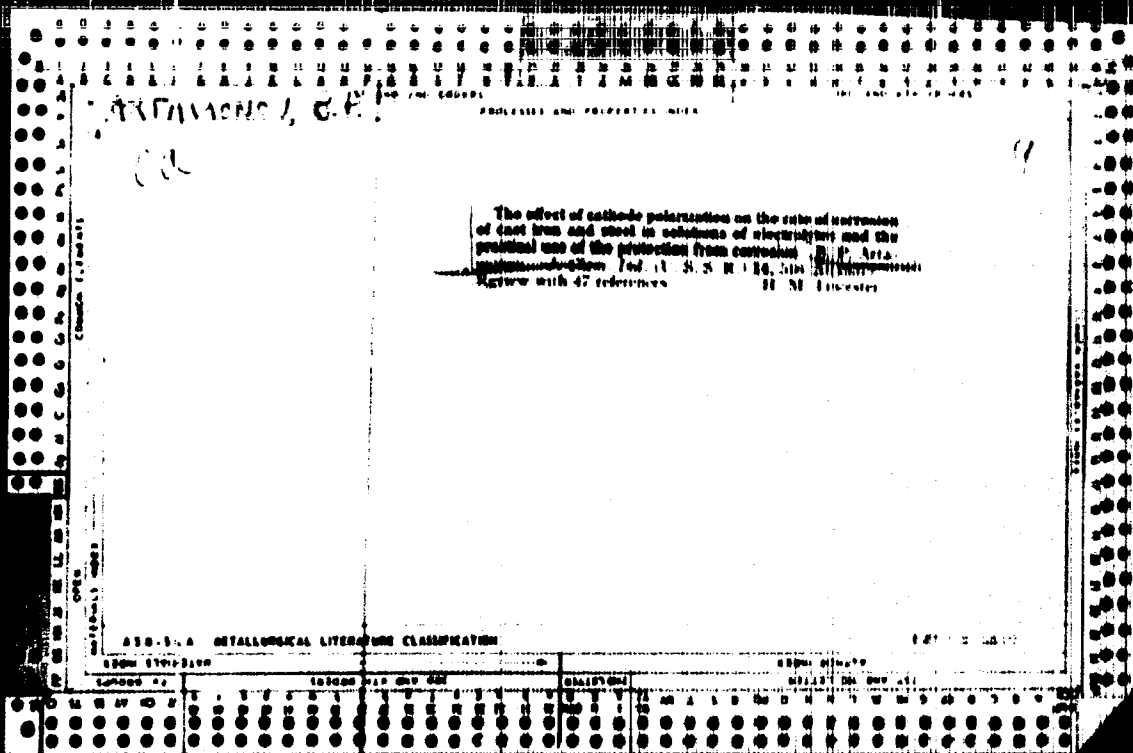


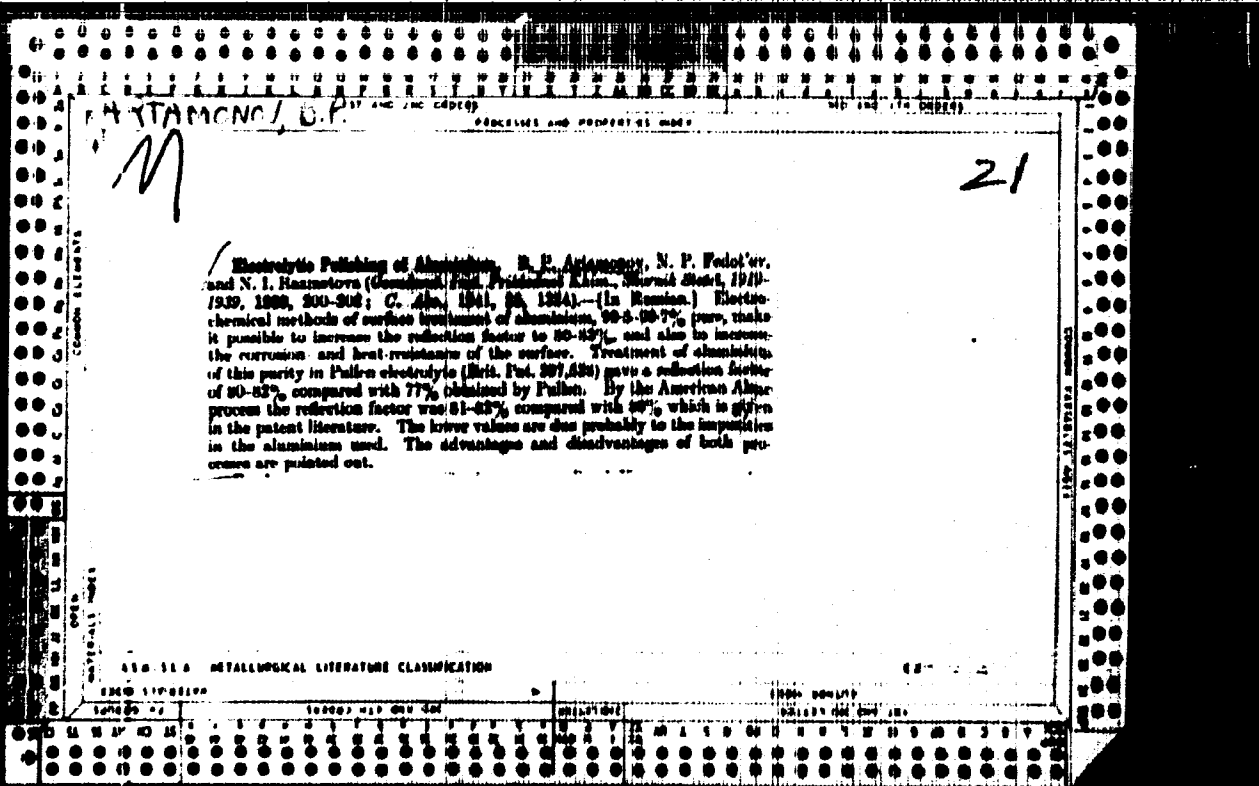
ARTAMONOV, B.P.

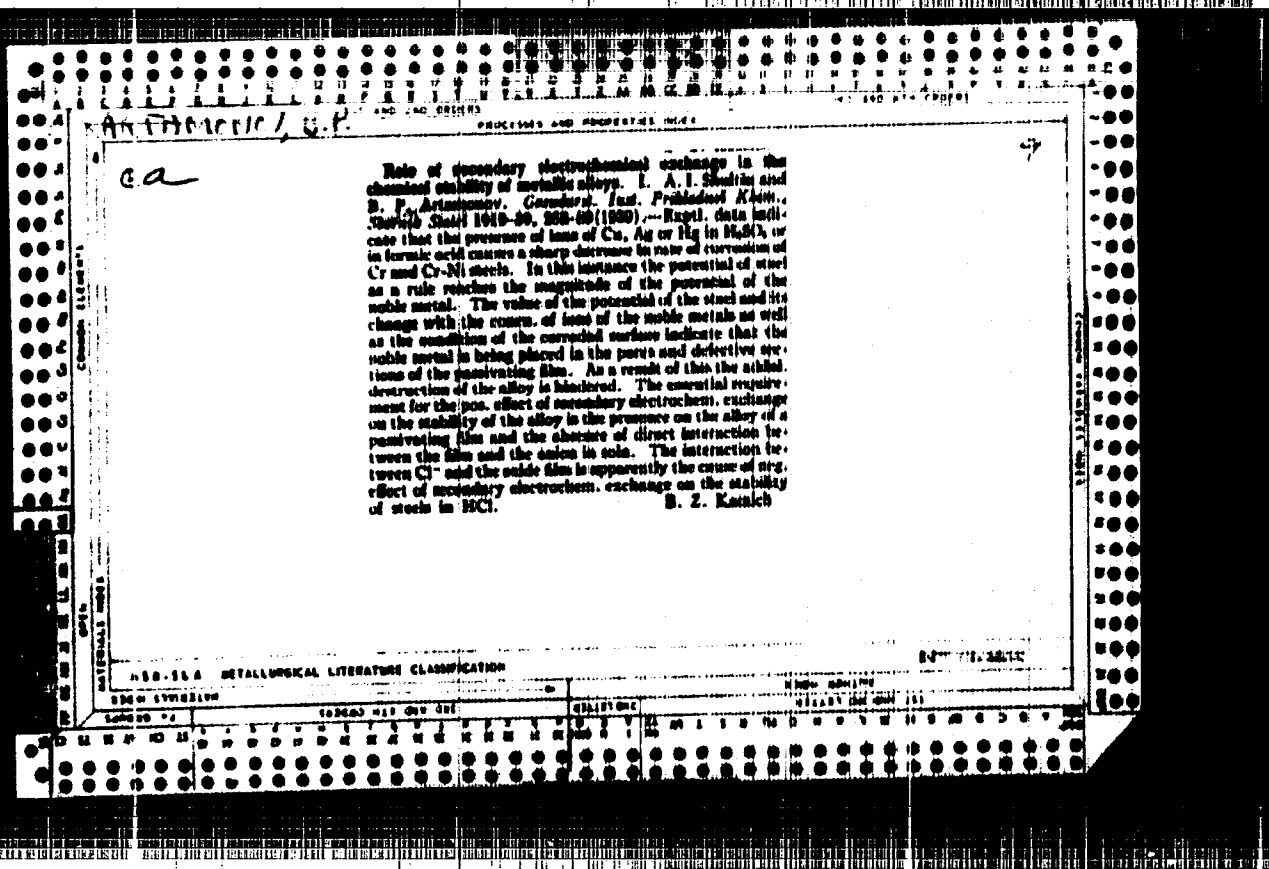
Conductometric method in the production and control of chemopharmaceutical preparations and drugs. *Farmatsev. zhur.* 19 no.4:16-19 '64.
(MIRA 17:11)

1. Leningradskiy khimiko-farmatsevticheskiy institut.









As Thermo, N.P.
10

9

The mechanism of the effect of alloying elements (Cu, Ag, Mo) on the chemical stability of steel containing Fe base alloys. N. P. Arakimov and A. I. Shubin. *Trudy Tsentral'noy Nauchnoy Krovnoy Akademii Nauk SSSR, Seriya Khimicheskaya, 1963, No. 1, p. 10-15, 10 refs.*

Specimens of steel containing: (1) C 0.10, Cr 17.0, Ni 0.01 and Mn 0.81; (2) C 0.10, Cr 18.0, Ni 0.01, Mn 0.40 and Si 0.24; (3) C 0.10, Cr 20.0, Ni 0.01, Mn 0.40 and Si 0.24; (4) Cast Fe containing C 0.05 and Si 18.00%; and (5) electrolytic Fe were tested for corrosion and electrode potential in 2 N solutions of H₂SO₄, HClO₄ and HCl to which small quantities (0.01-0.2 equiv./l.) of Cu, Ag, Pt, or Mo ions had been added. The presence of these ions in H₂SO₄ and HClO₄ greatly decreased the rate of corrosion and the potential of the steel specimens became approx. the same as the potential of the added metal. In HCl the addition of the metal ions increased the rate of corrosion and resulted in a potential value between electrolytic Fe and the added metal. The protective action of the ions in H₂SO₄ and HClO₄ results from the deposition of the metal on the surface of the passive layer (e.g., of Cr oxide) formed on the surface of corrosion-resistant alloys. If such a layer is not formed, as in HCl solution, the addition of ions characteristic to Fe will increase the rate of corrosion. N. W. R.

SECRET, U. S.

53117

USSR/chemistry - Development

Dec 1947

"State Institute of Applied Chemistry," B. P. Arty-
monov, Dep Dir Sci, 2 pp

"Khim Prom" No 12

First scientific research chemical institute of the
Soviet Union, established 1919, known as the Russian
Institute of Applied Chemistry. Briefly outlines its
development to its present-day prominence in field of
chemistry. Photograph shows general view from a river
showing part of the institute.

LC

53117

YELINOV, N.P., red.; ZIL'BERG, D.A., prof., red.; ARTAMONOV, B.P., dots., red.; RUDAKOVA, A.N., dots., red.; TSYGANOV, G.I., tekhn. red.

[Reports of a conference on June 23, 1960 devoted to the results of work for 1959] Materialy nauchnoi konferentsii, posvyashchennoi itogam raboty za 1959 god; tezisy dokladov konferentsii 23 iyunia 1960 g. Leningrad, 1960. 137 p. (MIRA 14:11)

1. Leningrad. Khimiko-farmatsevticheskiy institut. 2. Zamestitel' direktora po nauchno-uchebnoy chasti Leningradskogo khimiko-farmatsevticheskogo instituta (for Yelinov). 3. Zaveduyushchiy kafedroy gigiyeny Leningradskogo khimiko-farmatsevticheskogo instituta (for Zil'berg).
(CHEMISTRY, MEDICAL AND PHARMACEUTICAL)
(BOTANY, MEDICAL)

8/712/62/028/000/005/020
EO32/E114

AUTHORS: Artamonov, B.P., and Gershberg, R.Ye.

TITLE: A study of the brightness fluctuations in the diffuse nebula NGC 6618

SOURCE: Akademiya nauk SSSR. Krymskaya astrofizicheskaya observatoriya. Izvestiya. v.28. 1962. 156-158

TEXT: The function $G(r) = \Delta I^2(r) / I^2$ was computed for two regions of NGC 6618, where \bar{I} is the average surface brightness and $\Delta I(r)$ is the difference in brightness between two points separated by a distance r . The two regions are denoted by I and II in Fig.1, and the results obtained are given in Fig.2. The straight lines have slopes of $4/3$ as given by S.B. Pikel'ner (Izv. Krymskoy astrofiz. obs., 11, 1954, 34). There are 2 figures.

November, 1961

ARTAMONOV, B.P.

Investigating brightness fluctuations in the diffuse nebula NGC
2237-9. Izv. Krym. astrofiz. obser. 31:110-111 '64. (MIRA 17:9)

1. Gosudarstvennyy astronomicheskiy institut imeni P.K. Shternberga.

ARTAMONOV, B.P.; EUGREYVA, Ye.V.; PETRUNIN, V.I.

Wide-range high frequency conductometer. Zhur. fiz. khim. 39 no.3:796-801 Nr '65. (MIRA 18:7)

1. Leningradskiy khimiko-farmatsevticheskiy institut.

L 35830-66

ACC NR: AP6004903

SOURCE CODE: UR/0243/65/000/010/0064/0063

AUTHORS: Artamonov, B. P.; Kupina, N. A.

61
B

ORG: Leningrad Chemico-Pharmaceutical Institute (Leningradskiy khimiko-farmatsevticheskiy institut)

TITLE: Conductometric analysis in the manufacture and inspection of chemicals and pharmaceuticals. 4. Ionization constant, conductometric determination of Tubazid

SOURCE: Meditsinskaya promyshlennost' SSSR, no. 10, 1965, 61-63

TOPIC TAGS: ^{PHARMACEUTICAL} quantitative analysis, ionization potential, ph meter, hydrochloric acid, dissociation constant / ^{PHARMACEUTICAL} LPU-01 ph meter, Tubazid

ABSTRACT: The ionization constant of Tubazid is determined, and conductometric determination of Tubazid is studied. The work was done because of the defects of existing methods. An LPU-01 pH meter with an error of ± 0.04 pH units was used. All measurements except those with conductometric titration were done at $25 \pm 0.02^\circ\text{C}$. An experimental check showed that direct conductometric determination of Tubazid is possible, owing to its high pK_b (see Fig. 1). It was established that the pK_b of Tubazid at 25°C is 10.62 ± 0.02 ($pK_a = 3.38 \pm 0.02$). It is recommended that inverse conductometric titration of solutions of Tubazid in hydrochloric acid be used as a method of accurate quantitative determination.

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UDC: 615.724.8-014.3:543.257.5

L 35830-66

ACC NR: AP6004903

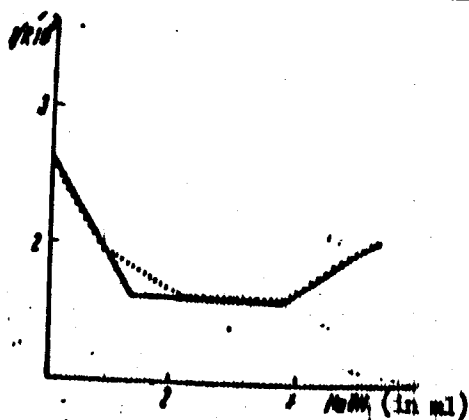


Fig. 1. Inverse conductometric titration of solution of Tubazid in hydrochloric acid.

Orig. art. has: 2 tables, 1 formula, and 1 graph.

SUB CODE: 06, Q7/ SUBM DATE: 29Apr65/ ORIG REF: 004

re
Card 2/2

ACC NR: AT6026561

SOURCE CODE: UR/2623/65/000/142/0012/0019

AUTHOR: Artamonov, B. P.

2/
2/

ORG: none

TITLE: Photometric investigation of the reflecting filamentary nebula near Meropa

12

SOURCE: Moscow. Universitet. Gosudarstvennyy astronomicheskii institut. Soobshcheniya, nos. 142-143, 1965, 12-19

TOPIC TAGS: ~~nebula~~ nebula, isophot map, ~~photometry~~ photometry, energy flux, Meropa

ABSTRACT: The filamentary nebula near the star Meropa in the constellation Pleiades was studied at the Southern Station of the State Astronomical Institute im. P. K. Shternberg by photographic and photoelectric observations. Photometric measurements of photographs were carried out by intersections of the nebula by planes passing through the illuminating star. A map of isophots was drawn. A brightness difference in nebular filaments between transverse and longitudinal sections was found. Photographs were taken in blue and yellow light, and the instrument and atmospheric influences were taken into consideration during compilation of filamentary contours. The absolute photometry was made by the method

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ACC NR: AT6026561

used in the Crimean Astrophysical Observatory. Energy fluxes in blue and yellow spectral ranges were computed and given in a table. The brightness rate in filaments of longitudinal and transverse sections for blue and yellow light was represented graphically. Photoelectric measurements of the color in filaments were carried out in different places in the direction of the Right Ascension. Results obtained make it possible to conclude that the reflecting nebula near the star Meropa are part of the dust cloud in which the constellation Pleiades is located. The cloud consists of one filament part located symmetrically around the star and another to the south of Meropa. The brightness of the nebula is found to be variable. The author expresses thanks to R. Ye. Gershberg, E. A. Dibay, and V. I. Kronik for valuable advice and attention. Orig. art. has: 7 figures, 1 table, and 3 formulas.

SUB CODE: 03/ SUBM DATE: 00Dec64/ ORIG. REF: 008/ OTH REF: 004/

Card

212 J 211

POBEMNI OV, Ivan Fedorovich, general-mayor yustitsii;
ARTAMONOV, Dmitriy Nikolayevich, polkovnik yustitsii;
DUKACHEV, M.F., red.

[Combined-arms regulations, a code of rules for the conduct
and activity of servicemen] Obshchevoinskie ustavy - srod
pravil povedeniia i deiatel'nosti voenno-sluzhashchikh. Po-
skva, Voenizdat, 1964. 68 p. (MIRA 18:9)

ARTAMONOV, D.

Reka Selenga. [Selenga river]. (Transport i khozvo, 1926, no. 7, p. 113-124).
DLC: HE7.T68

SO: Soviet Transportation and Communication, A Bibliography, Library of Congress,
Reference Department, Washington, 1952, Unclassified.

ARTAMONOV, D.S. ...Transport i torgovlia po vostochnoi granitse SSSR. Moskva, Transpechat', 1928. 295, (1) p.

DLC: HF3846.A7

SO: LC, Soviet Geography, Part II, 1951, Unclassified

ARTAMANOV, D.S.

Razvitie sudokhoistva no okrainakh. [The development of navigation in the outlying areas]. (Vodnyi transport, 1928, no. 5, p. 166-169).

DLC: HE561.R8

SO: Soviet Transportation and Communications. A Bibliography. Library of Congress Reference Department, Washington, 1952, Unclassified.

ARTAMONOV, D.

Rol' Bol shoi Volgi v snizhenii transportnykh raskhodov i poter'. The role of
the Greater Volga in lowering transport expenses and losses/. (Vodnyi transport,
1934, no. 3, p. 13-15). DLC: HE561.RE

SO: SOVIET TRANSPORTATION AND COMMUNICATIONS, A BIBLIOGRAPHY, Library of Congress
Reference Department, Washington, 1952, Unclassified.

Minimum requirements in technical education for the skipper of a tank-vehicle 2 izd.
Moskva, 1939. 167 p.

DI

1/ Tank-vehicle. "2. Petroleum-Transportation

ARTAMONOV, Dmitriy Sergeevich; LUPICHIN, Nikolai Pavlovich, redaktor;
SHEVCHIN, L.Ia., redaktor; SVIRIDOVA, A.A., redaktor;
VINOGRADOVA, N.M., redaktor; KRASHAYA, A.K., tekhnicheskii
redaktor.

[Manual for oil barge skippers] Posobie shkipera nefteaktivnoi
barzhi. Izd. 2-oe, parer. 1 dop. Moskva, Izd-vo "Mashnoi
transport," 1955. 182 p. [Microfilm] (MLRA 9:1)
(Tank vessels) (Petroleum--Transportation)

STALOVSKIY, A.N., doktor tekhn.nauk prof.; ARBAMINOV, D.S., inzh.;
CHEKHOV, O.S., kand.tekhn.nauk

Mass transfer in the liquid phase in bubble plate columns.
Khim.mash. no.1:13-16 Ja '60. (MIRA 13:5)
(Plate towers) (Mass transfer)

PIANOVSKIY, A.N., CHERKHOV, O.R., ARTAMONOV, D.S.

Hydraulic resistance of plates of different design.
Zhiv.pron. 2:151-152 My '60. (MIRA.13:7)
(Plate towers)

ARTAMONOV, D. S., Cand. Tech. Sci. "Study of Mass Exchange
in Absorbent with Screen Plates," Moscow, 1961, 14 pp (Moscow
Chem.-Engr. Inst.) 200 copies (KL Supp 12-61, 252).

BELOV, Vladimir Ivanovich; ARTAMONOV, D.S., red.; MIKHEYEV, N.I.,
red.

[Assembling industrial ventilation systems] Montazh sistem
promyshlennoi ventilatsii. Kuibyshev, Kuibyshevskoe
knizhnoe izd-vo, 1963. 35 p. (MIRA 17:4)

1. Brigadir slesarey montazhnikov trasta "Promventilyatsiya"
(for Belov).

MATUSHEVSKIY, Grigoriy Afanas'yevich; ARTAMONOV, D.S., red.;
PETROPOL'SKAYA, N.Ye., red.; DURASOVA, V.M., tekhn.red.

[Operation of machinery in road construction] Eksploa-
tatsiia mashin v dorozhnom stroitel'stve. Kuibyshev,
Kuibyshevskoe knizhnoe izd-vo, 1963. 123 p. (MIRA 17:2)

PLISOVSKIY, A.N.; ARTAMONOV, D.S.; ORLOV, B.N.

Comparative evaluation of the efficiency of rectification and
absorption apparatus. Khim.prom. 41 no.4:53-57 Ap 65.

(MIRA 18:8)

ARTAMONOV, D.S.; ORLOV, B.N.; TUMANOV, Yu.V.

Determining the coefficients of mass transfer during absorption.
Khim. i tekhn. topl. i masel 10 no.10:15-16 D '65.

(MIRA 18:10)

1. Moskovskiy institut khimicheskogo mashinostroyeniya.

ARTAMONOV, D.V.; BELAVENTSEV, N.V.; KORSHUNOVA, V.A., redaktor;
KONDYKIN, A.Ye., tekhnicheskiy redaktor.

[Preparing the rims of railroad car wheels; according to
Engineer F.Kovalev's method] Obrabotka bandazhei vagonnykh
kolesnykh par; obobshchenie po metodu inzh. Kovaleva.
Moskva, Gos.transp.zhel-dor.isd-vo, 1952. 31 p. [Microfilm]
(Car wheels) (MLWA 9:4)

ARTAMONOV, P.

Concentrate attention on construction projects of special importance. Fin. SSSR 23 no.12:46-47 D '62.
(MIRA 16:1)

1. Upravlyayushchiy Kemerovskoy kontorey Stroybanka SSSR.
(Kemerovo Province--Construction industry)

ARSHANOV, J.

Strengthen control of the Industrial Bank over construction in the
Kusnetak Basin. Fin. USSR 16 no. 3: 51-53 M'55. (MIRA 8:2)
(Kusnetak Basin--Construction industry--Finance)
(Kusnetak Basin--Banks and banking)

ARTAMONOV, P.

Dispersion of funds prolongs construction. Fin. SSSR 21
no.1:62-63 Ja '60. (MIRA 13:1)

1. Upravlyayushchiy Kemerovskoy oblastnoy kontory Stroybanka.
(Kemerovo Province--Banks and banking)
(Construction industry--Finance)

ARTAMONOV, P.

For strengthening business accounting in the construction industry.
Fin. SSSR 23 no.3:59-63 № 162. (MIRA 15:3)

1. Upravlyayushchiy Kemerovskoy oblastnoy kontoroy Stroybanka.
(Kemerovo Province--Construction Industry--Finance)

ARTAMONOV, F.

Speed up the working out of new rules in financing. Fin. SSSR
37 no.7:76-78 JI '63. (MIRA 16:8)

1. Upravlyayushchiy Kemerovskoy kontoroy Stroybanka.
(Kemerovo Province--Construction industry--Finance)

KOZHEVNIKOV, A.M., prof.; POPOVA, G.I., dots.; YEMOZITSOV, I.P.,
kand. tekhn. nauk, dots.; GERASENKOV, A.I., kand. sel'-
khoz. nauk; YUMAGULOV, G.L., kand. sel'khoz. nauk;
MAR'YASOV, V.G., assistant; VINOGRADOVA, N.I., kand. sel'-
khoz. nauk; ROKTANEN, L.P., dots., kand. biol. nauk;
KOKHONSKIY, F.M., Geroy Sotsialisticheskogo Truda, asst.
zooteknik RSFSR; MAKHOVSKIY, M.K., dots., kand. ekon.
nauk; ARTAMONOV, F.D., assistant; MAKAROVA, I.V., red.

[Corn in the Virgin Territory and Western Siberia] Kukuza
v tselinnom krae i Zapadnoi Sibiri. Moskva, Kolos, 1965.
229 p. (MIRA 18:9)

1. Omskiy sel'skokhozyaystvennyy institut im. S.M.Kirova
(for Kozhevnikov, Popova, Mar'yasov, Vinogradova, Kokhonskiy,
Makhnovskiy, Artamonov). 2. Zamestitel' direktora po nauchnoy
rabote Severo-Kazakhstanskoy opytnoy stantsii (for Yumagulov).
3. Zaveduyushchiy laboratoriyey kukuzy Sibir'skogo nauchno-
issledovatel'skogo instituta sel'skogo khozyaystva (for
Gerasenkov). 4. TSelinogradskiy sel'skokhozyaystvennyy institut
(for Roktanen).

AR'AMONOV, F.Z.

Improve the work of construction materials plants. Stroi.prom.
32 no.11:2-7 N '54. (MIRA 7:11)

1. Kemerovskaya oblastnaya kontora Prombanka.
(Building materials industry)

L 16194-63 EWT(1)/EWS(G)/EES/ES(W)-2--AVTC/ADP/ETI-3/AVL/UP(C)/
SSD-Pi-4/Pi-4/Pab-4/Po-4-AT
ACCESS ON NR: AP3705160

8/0054/63/000/006/1102/1102

SOURCE RZh. Fizika, Abs. 6 D694

AUTHOR: Artemonov, O. P.; Granovskiy, N. I.; Kcha, F. A.

79

TITLE: Plasmatron - high-temperature source of spectrum excitation

CITED SOURCE: Tr. Kazansk. univ. fiz. mat. nauk, 1960, v. 1, p. 285-294

TOPIC TAGS: Plasmatron, arc channel, spectrum excitation, argon, nitrogen, carbon dioxide

TRANSLATION: The operating principle and the construction of a plasmatron and of a device for introduction of a solution in a plasma jet are described. The connection between the diameter of the arc channel and the parameters that determine this diameter (absolute pressure of the supplied liquid, centrifugal pressure of the rotating liquid, or gas, pressure on the internal surface of the channel, density of liquid or gas, velocity of the liquid at the inlet and on the surface of the channel) is made more precise. It is established that the complex profile of the angular velocity of the rotating liquid, chosen for the calculations, gives

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ACCESSION NR: AR3005160

the best agreement with experiment. Ar, N₂, and CO₂ were used for the cooling and compression of the arc, and CO₂ was used to pulverize the solution. It was found that the best gas for stable operation of the plasmatron is Ar at 0.4-0.6 atmospheres for an arc current 17-25 amperes. A tentative conclusion is reached that the results of analyses made with the aid of a plasmatron display good reproducibility. E. Azizov.

DATE ACQ: 15Jul63

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PHASE I BOOK EXPLOITATION

SCV/2675

Moscow. Dom nauchno-tekhnicheskoy propagandy im. F. E. Dzerzhinskogo

Vychislitel'naya tekhnika i yeye primeneniye (Computation Technique and Its Application) Moscow, Gosenergizdat, 1959. 391 p. (Series: Obshchestvo po rasprostraneniyu politicheskikh i nauchnykh znaniy RSFSR) 5,000 copies printed.

Ed. (Title page): S. A. Lebedev, Academician; Ed. (Inside book): V.I. Savel'yev; Tech. Ed.: G. I. Matveyev.

PURPOSE: This collection of articles is intended for scientific, engineering and technical personnel engaged in research, design and operation of digital and analog computers. It may also be used by students of vuzes specializing in computers.

COVERAGE: The authors present fundamentals of digital computers, their elements and units such as arithmetic units, internal and external memory and control devices. They discuss the possibility of constructing computers using semiconductor elements and consider the fundamentals in the theory of logical circuits. They also discuss problems of programming and explain the operation of analog computers and their elements. Brief discussion of mathematical instruments is also presented. The articles were presented at a computer semi-

Card 1/8

Computation Technique (Cont.)

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nar arranged by Moskovskiy dom nauchno-tekhnicheskoy progagandy imeni F. E. Dzerzhinskiy (Moscow Center for Scientific and Technical Propaganda imeni F. D. Dzerzhinskiy) in 1957. No personalities are mentioned. References appear at the end of some articles.

TABLE OF CONTENTS:

Foreword

Lebedev, S. A., Academician. Electronic Digital Computers	3
The author presents a general discussion of electronic digital computers. He describes their operation and areas of application and considers prospects for further development. There are no references.	5

<u>Artamonov, G. T., Engineer. Problem Programming and Reducing Mathematical Operations to a Form Suitable for Digital Computers</u>	17
The author discusses methods of representing numbers in computers and performing arithmetical, logical and control operations. He also presents an example of solving a complex problem and presents methods of checking computer accuracy. There are 2 references, both Soviet.	

Card 2/8

Computation Techniques (Cont.)

SOV/2675

Alekseyev, V. Ya. Circuit Component Elements of High-speed Computers 51
The author discusses the principle of operation of basic elements and circuits of binary-system computers. He describes the operation of trigger circuits, coincidence and noncoincidence circuits and gate circuits. There are 9 references: 5 Soviet and 4 English.

Golovistikov, P. P., Candidate of Technical Sciences. Arithmetic Units of Universal High-speed Computers 67
The author discusses basic types of arithmetic units and the function they perform. He presents a block diagram of a universal arithmetic unit and describes circuits for receiving, sending and shifting codes. He also discusses adding and multiplying circuits. There are 7 references, all Soviet (including 1 translation).

Mel'nikov, V. A., Engineer. Control Devices of Universal High-speed Computers 87
The author discusses the principle of operation computer control devices and describes the control panel. He also explains methods of checking computer performance. There is 1 Soviet references.

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Computation Techniques (Cont.)

SOV/2675

Bardizh, V. V., Candidate of Technical Sciences. Operational Magnetic Memory Units. 105

The author discusses the principle of using magnetic cores with the rectangular hysteresis loop for operational memory units and describes methods of storing, reading and recording information. He also discusses the matrix method of connecting cores and explains the operation of various matrix circuits such as those with a dynamic bias and with a transfluxor. Memory units for multidigit numbers are also discussed. There are 8 references: 2 Soviet and 6 English.

Laut, V. H. Operational Memory Units Using Cathode-ray Tubes 133

The author discusses the operation of memory units and presents a block diagram of a parallel-connected memory circuit. He also discusses the operation of various types of tubes used in memory circuits and describes a barrier-grid storage tube and its operation. There are 2 references, both Soviet.

Kutukov, L. V., Engineer. Operational Memory Unit Using Capacitors and Semiconductor Elements 156

The author discusses the principle of operation of memory units using capacitors and semiconductor devices and describes their matrix circuits. He discusses the requirements of crystal diodes and presents the results
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Computat on Techniques (Cont.)

SOV/2675

of an experiment conducted with a memory unit using a DITs-8 type diode. He also discusses problems of increasing speed of operation of a memory unit and considers the possibility of using transistors in memory circuits. There are 10 references: 1 Soviet and 9 English.

Tyapkin, M. V. External Devices of Universal High-speed Computers 168

The author discusses input and output devices of high-speed computers and describes methods of feeding information to computers and obtaining calculated results. He also explains the operation of the external memory. There are no references.

Zimarev, A. N., Engineer. Construction of High-speed Computers Using Semiconductor Elements 185

The author discusses the possibility of using transistors in computer circuits and describes the operation of the following transistor circuits: amplifiers, pulse forming circuits, triggers and direct-coupled transistors. There are 4 references: 1 Soviet and 3 English.

Neslukhovskiy, K. S. Devices of Series Computing Machines. 201

The author discusses component elements of series computing machines such as dynamic triggers, circuits for transforming codes, adding and sub-
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Computation Techniques (Cont.)

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tracting circuits and circuits for determining coincidence of two codes. He also describes the operation of a series-type memory unit. There are no references.

Shcherbakov, O. K. Power Supply for Electronic Computers

217

The author discusses power supply systems of electronic computers and describes methods of constructing protective and signalling circuits. There are 10 references: 7 Soviet and 3 English.

Khetagurov, Ya. A., Candidate of Technical Sciences. Some Problems in the Design of Special High-speed Computers

236

The author discusses the operation of parallel, series and series-parallel digital computers and their components. He considers requirements of computers and discusses methods of preparing programs. There are no references.

Kobrinskiy, N. Ye., Professor, Doctor of Technical Sciences, and B. A. Trakhtenbrot, Candidate of Physical and Mathematical Sciences. Fundamentals of the Theory of Logical Circuits

248

The authors consider problems of analysis and synthesis of logical circuits in computers. They describe methods of transforming and coding information and circuits used. There are no references.

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Computation Techniques (Cont.)

SOV/2675

Ushakov, V. B., Candidate of Technical Sciences. Electronic Analog Computers for Solving Differential Equations

269

The author presents a general discussion of analog computers and considers fields of their application. He presents a table of Soviet computers, giving specifications, year of manufacture and the developing organization. There are 11 references, all Soviet (including 1 translation).

Vitenberg, I. M., Candidate of Technical Sciences. Operational Units of Analog Computers

297

The author discusses the operation of various units in a computer such as adders, integrators, differentiators, operational amplifiers, multipliers and functional converters and analyzes their circuits. There are 13 references, all Soviet (including 1 translation).

Gluzberg, E. A., Engineer. Use of Analog Computers in Engineering and Scientific Analysis

327

The author discusses the use of analog computers for analyzing performance of various industrial machinery such as rolling machines, dynamo-electric amplifiers, hydraulic motors, etc. Use of analog computers for solving hydraulic equations is also discussed. There are 8 references, all Soviet (including 2 translations).

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Computation Techniques (Cont.)

SOV/2675

Gluzberg, E. A., Engineer. Methods of Setting up Problems for Analog Computers and Checking Accuracy of Solutions

340

The author discusses the procedure of reducing problems to a form suitable for analog computers and describes methods of connecting various computer units. He explains methods of determining proper scale factors and transfer coefficients and presents numerical examples. He also discusses methods of solving nonlinear functions and considers computer accuracy. There are no references.

Vasmanov, V. V., Candidate of Technical Sciences. Modern Small Mathematical Instruments

366

The author discusses the construction and operation of mathematical instruments such as integrators, integraphs and planimeters. He also describes harmonic analyzers developed by Mader, Coradi and Henrici and explains the operation of instruments for analysing random functions. There are 14 references, 7 Soviet (including 4 translations) and 7 English.

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BAR. VAYSVA, Z.P.; KOZLOV, P.H.; ARTAMONOV, D.V., redaktor, KOMAR'KOVA,
L.M., redaktor izdatel'stva; KOMAROVA, V.V., tekhnicheskii redaktor

[Maps and atlases; a catalog] Karty i atlasy: katalog. [Moskva]
Glavknigotorg M-va kul'tury SSSR, 1957. 199 p. [Blank
for ordering from the catalog "Maps and atlases." Zetax po katalogu
"Karty i atlasy." 1957. 39 p. (MIRA 10:11)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gosudarstvennoi i
kartografii.
(Maps--Catalogs)

GOROFHOV, I.G., KAR-VAYEVA, Z.F., KOZLOV, F.M., ARTAMONOV, G.V., red.:
SHAMAROVA, T.A., red., isd.-va., ROMANOVA, V.V., tekhn., red.

[Maps and atlases; a catalog] Karty i atlasy; katalog. [Moskva]
Glavknigotorg M-va kul'tury SSSR, 1958. 105 p. [Order blanks for the
catalog "Maps and Atlases."] Zakaz po katalogu "Karty i atlasy."
1958. 42 p. (MIRA 11:9)
(Bibliography--Maps)

6-1-16/16

AUTHOR: None Given

TITLE: Chronicles (Khronika)

PERIODICAL: Geodeziya i Kartografiya, 1958, Nr 1, pp. 79 - 80 (USSR)

ABSTRACT: A conference of the directors of the cartographical printing-offices and of the scientific divisions for map-composition took place in the Central Office for Geodesy and Cartography at the Ministry of the Interior of the USSR from December 16th to December 20th, 1957. This conference was devoted to the problems concerning the state of the cartographical printing-offices GUGK and to the measures required to fulfil the plan for 1958. The representatives of the military-topographical office, the TsNIIGA i K and the MIIGA i K attended this conference. The conference was opened by the director of the GUGK (Central Office for Geodesy and Cartography), A. N. Baranov. Lectures were held by: 1) The head of the division GUGK - G. V. Artamonov on: "On the performance of the plan by the cartographic printing-offices GUGK within 11 months of the

Card 1/2

Chronicles

6-1-16/16

year 1957. 2) A. B. Kazakov, Engineer-in-chief of the planning-division GUGK "On the project of the plan for 1958". 3) The chief of the division for work and wages GUGK L. P. Yegorov "On standardizing and tariffs for cartographical works". 4) P. N. Novoshilova, Engineer-in-chief of the division GUGK "On Measures for improving the organization of production in the cartographical factories and in the NREK-Chast' GUGK". 5) S. I. Shurov, editor of the division GUGK "On the editorial- and composition works". The military-historical maps of the third volume of the sea-atlas are already printed in the printing-offic of Minsk. The maps for the great Soviet encyclopedia are already completed. There comprise 2500 maps altogether. The lay-out of the building of the printing-office in Novosibirsk was changed. The printing-offices in Omsk and Tbilissi (Tiflis) worked unrhythmically. The cartographic industry has no scientific research station. The young experts are insufficiently promoted.

AVAILABLE:

Library of Congress

Card 2/2

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tekhn.red.

[Cartographic tables] Kartograficheskie tablitsy, seriya
pererabotannoe i dopolnennoe izdanie. Moskva, Izd-vo geodes.
lit-ry, 1960. 203 p. (TSentral'nyi nauchno-issledovatel'skii
institut geodesii, aerofotometrii i kartografii, Trudy, no.132) (MIRA 14:11)
(Cartography--Tables, etc.)

ARTAFONOV, I. D.

Zenitnye prozhektory i zvukopoleznatory; posobie dlia ofitser'skogo
sostava zenitoprozhektornykh chastei. Moskva, Voen. izd-vo, 1944.
282 p., illus., diags.

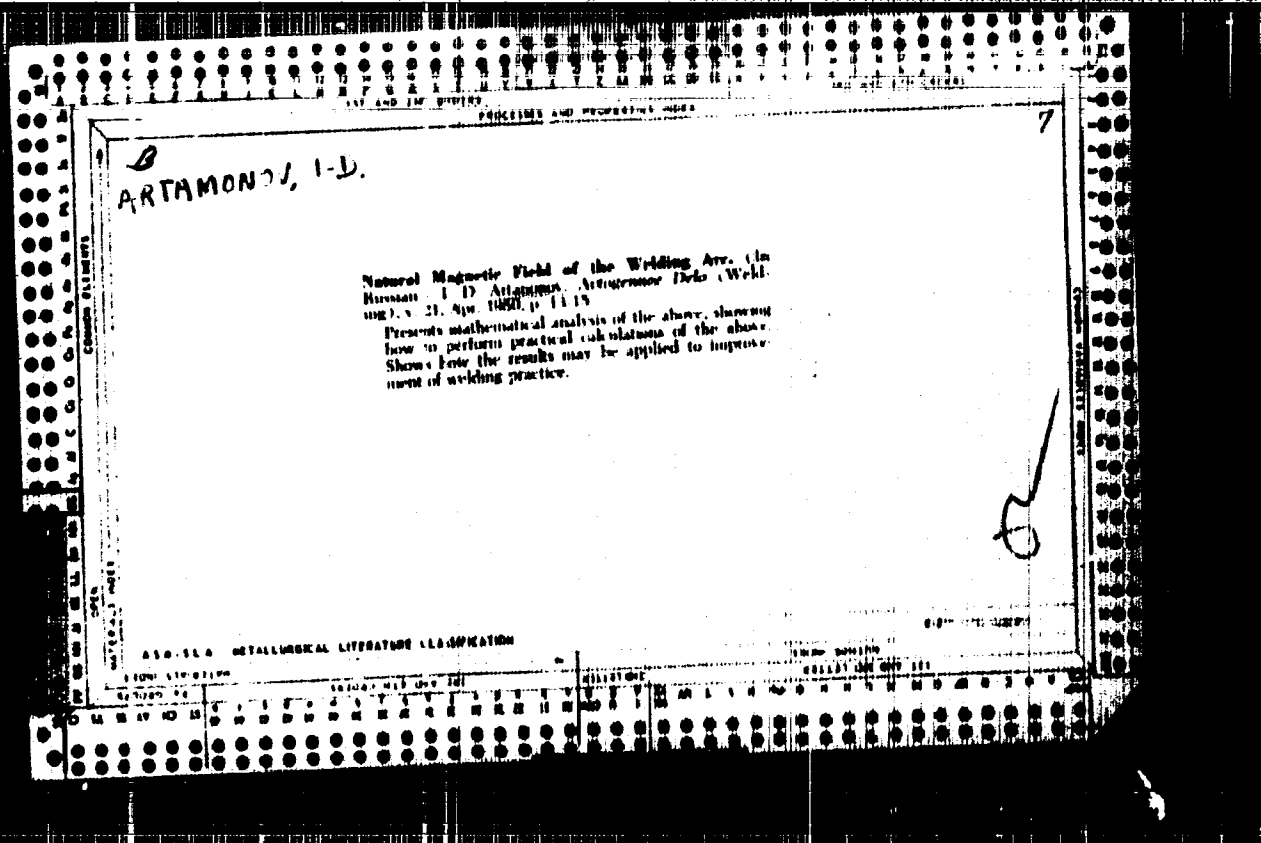
Title tr.: Searchlights and sound range finders.

UF625.A7

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 1945.

ARTAMONOV, D. D.

"Utilization of V. N. Chikolev's Method for Determining the Distribution of Light in a Projector and the Development of This Method", Elektrichestvo, No. 6, 1948, Cand Tech Sci Mil Eng Acad imeni Kuybyshev. -01548-



6/18/79/008/64/080/080
8931/1113

Author: Salzman, V. I.

Title: The Scientific-Technical Conference at Kharkov
Aviation Institute

Periodical: Innovative Technological Conferences at Kharkov
Institute, 1959, No. 4, pp. 161-165 (1959)

Abstract: In May 1959, the 16th Conference of Professional and
Leading Staff took place.

Mathematical and Technical Problems. The following papers
were read: "A Special Investigation of the Theory
of Anisotropic Turbulence" by Academician of Physical
and Mathematical Sciences S.M. Zhurav; "On the
Methods for Problems with Variable Coefficients"
by Academician M. G. Mikheyev; "Existence, Uniqueness and
Stability of Solutions for Mixed Systems of Partial
Differential Equations" by Academician of Physical and
Mathematical Sciences G. G. Vainikko; "On the Application
of Ball and Chebyshev Polynomials in the Solution of Some
Problems in the Synthesis of Four-Bar Linkages" by
Academician of Physical and Mathematical Sciences
I. G. Zhurav; "The Influence of the Structural
Properties of Materials on the Construction of
Structures" by Academician of Physical and Mathematical Sciences
I. G. Zhurav.

Mathematical and Technical Problems. The following papers
were read: "On the Problem of the
Potential for Rigidity Analysis" by Academician
of Physical and Mathematical Sciences
I. G. Zhurav; "The Problem of
Stability of Structures with Variable
Coefficients" by Academician of Physical and
Mathematical Sciences M. G. Mikheyev; "On the
Existence, Uniqueness and Stability of
Solutions for Mixed Systems of Partial
Differential Equations" by Academician of Physical and
Mathematical Sciences G. G. Vainikko; "On the
Application of Ball and Chebyshev Polynomials in the
Solution of Some Problems in the Synthesis of Four-Bar
Linkages" by Academician of Physical and Mathematical
Sciences I. G. Zhurav; "The Influence of the
Structural Properties of Materials on the Construction
of Structures" by Academician of Physical and
Mathematical Sciences I. G. Zhurav.

Mathematical and Technical Problems. The following papers
were read: "On the Problem of the
Potential for Rigidity Analysis" by Academician
of Physical and Mathematical Sciences
I. G. Zhurav; "The Problem of
Stability of Structures with Variable
Coefficients" by Academician of Physical and
Mathematical Sciences M. G. Mikheyev; "On the
Existence, Uniqueness and Stability of
Solutions for Mixed Systems of Partial
Differential Equations" by Academician of Physical and
Mathematical Sciences G. G. Vainikko; "On the
Application of Ball and Chebyshev Polynomials in the
Solution of Some Problems in the Synthesis of Four-Bar
Linkages" by Academician of Physical and Mathematical
Sciences I. G. Zhurav; "The Influence of the
Structural Properties of Materials on the Construction
of Structures" by Academician of Physical and
Mathematical Sciences I. G. Zhurav.

Card 3/11

Card 4/11

PHASE I BOOK EXPLOITATION 973

Artamonov, Ivan Dmitriyevich

Prozhektory i ikh primeneniye (Searchlights and Their Use) Moscow.
Voyen. izd-vo M-va obr. SSSR, 1957. 85 p. No of copies printed
not given.

Ed.: Kokosov, G.V.; Tech. Ed.: Myasnikova, T.F.

PURPOSE: The book is intended for searchlight crews and technicians
of military units. It may also be used by civilian technicians
working in this field.

COVERAGE: The book describes the construction and operating principles
of modern searchlight equipment and properties of the searchlight
beam. It also discusses problems of visibility in searchlight
practice and describes applications of searchlights in military
operations. No personalities are mentioned. There are no references.

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Searchlights and Their Use 973

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Searchlights used in aviation
Floodlights

81
84

AVAILABLE: Library of Congress

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12-12-58

Card 4/4

ARTAMONOV, Ivan Dmitriyevich; VERES, L.F., red.; KOLESNIKOVA, A.P.,
tekh. red.

[Optical illusions] Illuzii srenia. Moskva, Gos.izd-vo
fiziko-matem.lit-ry, 1961. 74 p. (MIRA 15:7)
(Optical illusions)

СЕНТЕНОВ, Иван Андреевич; ВЕКО, А.Ф., ред.

[Optical illusions; Illuzii zreniya. 130.2., paper.
Moskva, Izd-vo Nauka, 1964. 101 p. (MIRA 17:8)

ARTAMONOV, I.D.

Long-distance lighting. Trudy Inst. 1st. est. 1. tekhn. 44:43-115
'62. (MIRA 18:3)

BEIGZEMOV, V. G., (Kursk, ul. Engel'sa d.136, kv.27); SKVORTSOV, B.A. (Leningrad, ul. Soyuza pechatnikov, d.7.kv.26); PARKHOMCHUK, Ya. (Leningrad, ul. Soyuza pechatnikov, d.7.kv.26); TRAUBE, Ye.S. (Donetsk, 5, ul. Shchorsa, d.12, kv.8); DROZDOV, A.D. (Novocherkassk, ul. B.Khmel'nitskogo d.151, kv.26); VAYNBERG, A.M. (Moskva, V-180, Malaya Yakimanka, d.22, kv.19); FILATOV, M.A. (Kemerovo, ul. Dzerzhinskogo d.27, kv.11); GANZBURG, L.B. (Leningrad P-3, Krasnosel'skaya, d.12, kv.2); BUDANOV, V.D. (Moskva, A-287, Chuksin tupik, d.4, kv.17); LYSENKO, N.G. (Kiyev, ul. Sulimovskaya, d.5.kv.71); SHKRGIN, Ye.N. (Cherkassy, ul. Uritskogo, d.37, kv.6); TRUSHCHEV, Ye.A.; SUVOROV, Yu.I. (Riga, ul. Suvorova, d.20, kv.11); ARTAMONOV, I.G. (Riga, ul. Suvorova, d.20, kv.11); OKHAPKIN, V.V. (Yaroslavl', Tutayevskoye shosse, d.32); OL'KHOVSKIY, I.L. (Khar'kov, pr. Moskovskiy, d.199)

Discoveries and inventions. Prom.energ. 19 no.7:55-56 JI '64.

(MIRA 18:1)

1. Bereznikovskiy soedovyy zavod, byuro po ratsionalizatsii i izobretatel'stvu, Parnskaya obl., g. Berezniki (for Trushchev).
2. Yaroslavl', Tutayevskoye shosse, d.32, YaZMORK (for Okhapkin).
3. Khar'kov, pr.Moskovskiy, d.199, Khar'kovskiy elektromekhanicheskii zavod, byuro po ratsionalizatsii i izobretatel'stvu (for Ol'khovskiy).

SHED ABASHEV, P.E.; ARTANONOV, I.S.

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18 no.4:59-61 Ap '65
(MIRA 18:6)

ABRAMOV, Ivan Semanovich; KLEYMAN, M.Ya., red.; KRASHKINNIKOVA, V.F.,
tekhn.red.

[The eighth stage] Vos'maia stupen'. Stalingrad, Stalingradskoe
knishnoe izd-vo, 1958. 91 p. (MIRA 12:12)
(Volga River--Hydroelectric power stations)

1. ATTANON, E.; DRY, A.
2. USSR (600)
4. Dams
7. Using alkaline soils in hydraulic engineering construction work, Kolpkevodstvo, No. 9, 1962.

9. Monthly List of Russian Accessions, Library of Congress, February, 1953. Unclassified.

ARTANONOV, K.F., Kandidat tekhnicheskikh nauk.

Use of regulating and bank-protecting structures. Gidr. i mel. 5 no.9:36-45
S '53. (MKRA 6:9)
(Hydraulic engineering)

ANTALONOV, K.F.

~~Problem of the efficient layout of water-diversion works. Trudy~~
Inst.vod.khoz.i energ.AN Kir.SSR no.2:37-41 '55. (MLRA 9:11)
(Hydraulic engineering)

ARTAMONOV, I.F.

Improving the design of river defense structures in piedmont
district. Trudy Inst.vod.khos.i energ.AN Kir,SSSR no.3:69-77
'56. (MLR 9:11)

(Kirghizistan--Shore protection)

ARTAMONOV, K.F.; KABAKOV, M.M., red.; TSYBINA, Ye.V., tekhn.red.

[Control installations and work on rivers in piedmont districts]
Regulirovochnye soorusheniia i rabory na rekakh v predgornyykh
raionakh. Frunse, 1957. 170 p. (MIRA 11:1)
(Rivers—Regulation)

KARAKOV, M.M., kandidat tekhnicheskikh nauk; ARTAMONOV, K.F., redaktor;
TSYBINA, Ye.B., tekhnicheskii redaktor,

[Observations of channel cycles and their usefulness for operation
of irrigation systems] Balansovye usloviya nabludeniia i ikh
ispol'zovanie pri eksploatatsii orositel'nykh sistem. Frunze, Akad.
nauk Kirgizskoi SSR, 1957. 180 p. (MIRA 10:4)
(Irrigation)

ARTAMONOV, K.P.; IBRAIMOV, S.I.

Experience with channel straightening methods at the Chumysh Dam
site. Trudy Inst. vod. khos. i energ. AN Kir. SSR no.4:17-39 '57.
(MIRA 10:12)
(Rivers--Regulation)

SOV/124-58-11-12941

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 154 (USSR)

AUTHOR: Artamonov, K. F.

TITLE: New Design of an Instrument for the Measurement of the Direction and Magnitude of Velocities in River-bed Models (Novaya konstruktsiya pribora dlya izmereniya napravleniya i velichiny skorostey na ruslovykh modelyakh)

PERIODICAL: Tr. In-ta vodn. kh-va i energ. AN KirgSSR, 1957, Nr 4 (7), pp 133-136

ABSTRACT: A description is given of the design and functioning of a new instrument for the simultaneous determination of the direction and magnitude of velocities obtaining in a fluid flow. The direction of the velocity is determined from a pointer which is connected to a direction-responsive vane immersed in the flow. The magnitude of the speed is read off a scale; the pointer is connected by means of a gear system, with a 1:4 gear ratio, to two foils within the flow which are deflected by an angle that corresponds to the given flow speed. In comparison with the Pitot and Rehbock tubes the new instrument is simple both in design and in operation; it affords speedy

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SOV/124-58-11-12941

New Design of an Instrument for the Measurement of the Direction (cont.)

measurement and does not clog up in turbid water. The limited dimensions of the directional vane blades make it possible to refer the velocities measured on a large-scale model to the small dimensions of a restricted space in the flow and to perform measurements in regions of tight curvature of fluid jets.

T. B. Kurova

Card 2/2

ARTIMONOV, K.F.; RAMAZAN, M.S.; TALMAZA, V.F.

Use of water intakes with bottom racks in Kirghizistan.
Trudy Inst. vod. khoz. i energ. AN Kir. SSR no.6:75-99 '59.

(MIRA 15:5)

(Kirghizistan--Water-supply engineering)

ARTAMONOV, K.F.; KOSTYUCHENKO, E.V.; BAYBEKOV, M.A.

Results of investigating the formation of the forebay and the
afterbay of the western branch intake of the Great Chu Canal.
Trudy Inst. vod. khoz. i energ. AN Kir. SSR no.6:133-154 '59.
(MIRA 15:5)

(Great Chu Canal--Hydraulic structures)

ARTAMONOV, K.F.; SATARKULOV, S.

Apparatus for proportioned feeding of sediments to stream channel
models. Izv. AN Kir. SSR. Ser. est. i tekhn. nauk 2 no. 4: 183-186 '60.
(MIRA 14:8)

(Hydraulic models)

ARTAMONOV, K.F.; TALMAZA, V.F.

Profilograph of a new design for model channels. Inv. AN Kir. SSR.
Ser. est. i tekhn. nauk 2 no. 4: 187-192 '60. (MIRA 14:8)
(Hydraulic models)

KABAKOV, M.M., kand. tekhn. nauk; NAZAROV, V.I., kand. tekhn. nauk;
ZHAROVA, K.A., nauchnyy sotr.; KAPLINSKIY, M.I., kand. tekhn.
nauk; ARTAMONOV, K.E., kand. tekhn.nauk; RAMAZAN, M.S., kand.
tekhn. nauk; KOSTYUCHENKO, E.V., kand. tekhn. nauk; TESLENKO,
V.G., nauchnyy sotr.; TERESHCHENKO, V.S., nauch.sotr.; TAIMAZA, V.F.;
LEVITUS, B.I., red. izd-va; ANOKHINA, M.G., tezhn.

[Field investigation of irrigation systems] Proizvodstvennye
issledovaniia na orositel'nykh sistemakh. Frunze, Izd-vo AN
Kirgizskoi SSR, 1961. 302 p. (MIRA 15:9)

1. Akademiya nauk Kirgizskoy SSR, Frunze. Institut energetiki
i vodnogo khozyaystva.

(Kirghizistan--Irrigation)

ARTAMONOV, K.F.

Automatic gate for hydraulic structures. Izv.AN Kir.SSt.Ser.est.
i tekhnauk 3 no.6:111-115 '61. (MIRA 15:11)
(Hydraulic engineering—Equipment and supplies)

ARTAMONOV, K.F.; TESLENKO, V.G.; MAZUR, O.M.

Construction methods and percolation coefficients of dams
made of nonhomogenous materials. Izv. AN Kir. SSR. Ser. est.
i tekhn. nauk 4 no.5:107-115 '62. (MIRA 1604)

(Dams)

ARTAMONOV, K.F.

Hydraulic engineering laboratory of the Institute of Power
and Water Management of the Academy of Sciences of the Kir-
ghizistan S.S.R. Izv. AN Kir. SSR. Ser. est. i tekhn. nauk 5 no.
3:5-11 '63. (MIRA 16:11)

ARTAMONOV, K.F.; RAMAZAN, H.S.; SATARKULOV, S.S.; TALMAZA, V.P.

Water intakes for mountainous sections of rivers. Izv. AN Kir.
SSR. Ser. est. i tekhn. nauk 5 no.3:53-69 '63. (MIRA 16:11)

ARFAMONOV, K.P.; RAMAZAN, M.B.; SATARKULOV, S.S.

Improved gratings of water intakes. Izv. AN Kir. SSR, Ser. est.
i tekhn. nauk 5 no. 3:71-77 '63. (MIRA 16:11)

A. TAMONOV, K.P. ; KOSTYUKENKO, E.V.; KRUSHKIN, A.N.; LOPATIN, L.S.

Experiment with filtering rock-fill dams in Kirghizistan. Izv.
AN Kir. SSR. Ser. est. i tekhn. nauk 5 no.3:79-101 '63.

ARTAMONOV, K.F.; VYSOCHANSKIY, B.L.

Regulating rock-fill installations. Izv. AN Kir. SSR. Ser.
est. i tekhn. nauk 5 no.3:129-139 '63. (MIRA 16:11)

ARTAMONOV, K.I. (Moskva)

Stability of the performance of a liquid-propellant rocket engine. Izv. AN SSSR, Otd. tekhn. nauk Mekh. i mashinost. no. 1:64-69 Jan-F '61. (DIEPA 14:2)
(Airplanes--Rocket engines)

ARTAMONOV, K.I.; LEBEDEV, I.I.; YERGALIYEV, E.Ye.; LESHCHKO, A.K.;
YAKUSHIN, M.V.; KAZAROV, V.H.; BRYUKHANOV, N.G.; NIKITINA, L.I.;
KHVESYUK, F.I.; *Prinimali uchastiye:* MATVEYEV, A.S.; KOVALEV, S.I.;
ROMANOV, V.S.; MARCHENKO, B.P.; ZUDOVA, T.I.; OMAROV, M.N.;
PECHENKIN, S.N.; LUKIN, Ye.G.; KHLUDKOV, V.I.

Shaft-furnace copper smelting with an oxygen-enriched blow.
TSvet. net. 34 no.3:32-39 Mr 161. (MIRA 14:3)

1. Irtyshskiy polimetallicheskiy kombinat (for Artamonov, Lebedev,
Yergaliyev, Lesechko, Matveyev, Kovalev, Romanov, Marchenko, Zudova,
Omarov). 2. Vsesoyuznyy nauchnoissledovatel'skiy institut tsvetnykh
metallov (for Yakushin, Kasakov, Bryukhanov, Nikitina, Khvesyuk,
Pechenkin, Lukin, Khludkov).
(Copper—Metallurgy) (Oxygen—Industrial applications)

YAKUSHIN, M.V.; BRYUKHANOVA, N.G.; KAZAKOV, V.M.; NIKITINA, L.I.;
KHVESYUK, F.I.; PECHENKIN, S.M.; ARTAMONOV, K.I.; LEBEDEV, N.I.;
MATVEYEV, A.T.; KOVALEV, S.I.

Converter treatment of complex metal mattes with an oxygen
enriched blow. Tsvet.met. 34 no.10:34-39 0 '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut tsvetnykh metallov
(for Yakushin, Bryukhanov, Kazakov, Nikitina, Khvesyuk, Pechenkin).
2. Irtyskiy polimetallicheskiy kombinat (for Artamonov, Lebedev,
Matveyev, Kovalev).

(Nonferrous metals--Metallurgy) (Converters)

66381

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N.

SOV/84-59-8-54/80

AUTHOR: Artamonov, L., Senior Engineer

TITLE: Aerial Electromagnetic Photography

PERIODICAL: Grazhdanskaya Aviatsiya, 1959, Nr 8, p 24 - 25 (USSR)

ABSTRACT: The author explains the principal features of a new method of aerial mapping and photography of areas of deposits of useful minerals, named aerial electromagnetic photography. This new method has been worked out by the Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i tekhniki razvedki Ministerstva geologii i okhrany nedr SSSR (All-Union Scientific Research Institute of Methods and Techniques of Prospecting of the Ministry of Geology and Preservation of Natural Resources of the USSR) in a common effort with some organizations of the Akadeniya nauk SSSR (Academy of Sciences of the USSR) and the Academy of Sciences of the UkrSSR. This method is intended for increasing the efficiency of geological prospecting work and is based on utilization of different electric

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Aerial Electromagnetic Photography

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cal conductance of various minerals and ores. Flight tests of equipment and experimental aerial electromagnetic photographs were made in Il-12 aircraft flown by pilots V. Kryukov, S. Baryshev and V. Nazarov. The results have been promising. The aircraft carries a 10-20 loop frame antenna fed with audio frequency a.c. generated by aircraft GSN-3000 generators. So as to reduce the antenna's interference drag, its longer sides are placed in parallel to the line of flight. The wires are attached to a 3-5 mm steel cable strung between special struts on engine nacelles and the stabilizer attachment joints. The wires and the cable are taped with a chlorvinyl ribbon. An audio frequency current in the frame creates an electromagnetic field, from which electric current is directed into the ground. The magnitude of current and its phase angle depend on the electrical conductance of mineral or ore deposits the aircraft is flying over. Reception of vertical or horizontal magnetic field components is effected by frame antennas located within a separate gondola towed by the aircraft on a special 150 m long cable. The

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Aerial Electromagnetic Photography

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gondola also carries a preliminary incoming signal amplifier. From the gondola, the picked-up and amplified signal is conducted to a recording instrument aboard the plane, which at the same time registers time and marks the landmarks. The experimental flights for aerial electrical prospecting were made at an altitude of 200 m and were accompanied by photographing the areas under the plane. By the author's experiments, it was found that in a flight within 220-290 km/hour, the 70 kg gondola followed at an altitude 74-57 m lower than that of the aircraft. The gondola is taken in and paid out by a special electrically operated winch. In case of emergency, the pilot can drop it by pressing a button at his seat, which activates an automatic cut off device. The aerial electrical prospecting equipment is fed from the aircraft network via a MA-2500 d.c. converter, 115 v and 400 cycles. Current consumption (i.e.) is about 5 kw. Experiments have shown that when the reception gondola was out, the radio-compass and the radio-altimeter RV-2 showed errors, which however, could be neglected. These short

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Aerial Electromagnetic Photography

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comings are expected to be overcome through further improvement of aerial electrical prospecting equipment. Other research efforts will be applied to working out the methods of practical application of equipment, conforming to specific requirements of geological prospecting. A photo on page 25 shows an outstanding photogrammetrist from a sub-unit commanded by Ye. Gavrilov, at a SM-4 stereometer. There is 1 sketch and 1 photo.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i tekhniki razvedki (All-Union Scientific Research Institute of Prospecting Methods and Technique)

Card 4/4

3.4000

84113
S/084/60/000/006/018/020
A104/A029

AUTHORS: Nazarov, B., Captain and Artamonov, I., Chief Engineer of VITR*

TITLE: Electromagnetic Air Survey

PERIODICAL: Grazhdanskaya Aviatsiya, 1960, No. 6, pp. 24 - 25.

TEXT: The author discusses the merits and gives details of electro-magnetic air survey, - a modern mineral prospecting method developed by the Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i tekhniki (All-Union Scientific Research Institute of Methods and Techniques) in collaboration with GVP summer sub-sections and other organizations. The survey was carried out from an altitude of 200 m along a net of parallel runs; the automatic tape-recorder was supplemented by tied-in aerophotography. The runs were 30 - 100 m long and 1 - 2 km distant from each other. The gondola containing sensitive recording equipment was lowered by a 150 m long cable. In order to avoid the detrimental effect of oscillation, of the aircraft engine etc. these flights are best performed during early morning hours when aircraft swayings can be averted. Last year's survey in Kazakhstan

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Electromagnetic Air Survey

showed that this favorable morning period lasts only about 2 - 3 hours. The pilot should adhere to the fixed runs and perform all operations as smoothly as possible. The signal coefficient depends to a great extent upon the geological structure of the surveyed area, necessitating a strict adherence to a fixed true altitude and steady speed. Mi-12 (Il-12) develops an average speed of 275 - 285 km/p.h. requiring intensified engine performance. The head resistance of Il-12 and Mi-14 (Il-14) can be reduced by the removal of blisters.

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ARTAMONOV, L.V.; SHUVAL-SERGEYEV, N.M.

Dipole induction profiling in aereoelectric prospecting. Trudy
VITR no.3:109-117 '61. (HIRA 15:7)
(Electric prospecting)

S/169/62/000/003/011/098
D228/D301

AUTHORS:

Artamonov, L. V. and Rivosh, L. A.

TITLE:

Trial complex application of aeroelectrical prospecting and aeromagnetic surveying in the geologic conditions the crystalline Baltic Shield [Abstracter's note: Read 'v' for 'i' in the Russian title, otherwise translate by 'and the geologic ...' instead of 'in the ...']

PERIODICAL:

Referativnyy zhurnal, Geofizika, no. 3, 1962, 19, abstract 3A157 (Sov. geologiya, no. 8, 1961, 98-105)

TEXT: The authors give the results of aerosurvey operations, and also information on the magnetic and electrical properties of the area's rocks and ores, An aircraft of the ИЛ-14 (IL-14) type, on which an experimental АЭДИС (AERIS) aeroelectrical prospecting instrument and an АСМ-25 (ASGM-25) aeromagnetometer were mounted, was used in the survey. The flight altitude was 150 - 200 m, the distance between profiles being 2 km. It is concluded that aero-

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Trial complex application ...

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electrical prospecting in the conditions of the Baltic Shield substantially complements the data of aeromagnetic surveying, and that the joint use of these techniques permits the solution of geologic mapping problems, the distinguishing of tectonic fractures, and the establishment of the character of the contact zones near the boundaries of different geologic formations. The complex application of aerial surveying is recommended for Kareliya and the Kola Peninsula if conducting sulfide bodies are being sought. [Abstracter's note: Complete translation.]

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ARTAMONOV, L.V.; SHUVAL-SERGIYEV, N.M.

Aerial-electric surveying in geologic mapping. *Sov. geol.*
4 no.2:125-132 F '61. (NIEA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metdiki i
tehniki rasvedki.
(Geology--Aeronautics in surveying)