GOLDAT, S. Yu.

"A new case of Bar mutation." Department of Genetics (Chief: N. P. Dubinin), Institute of Experimental Biology (Dir: Acad. N. K. Koltsov), Ministry of Health, Moscow (p. 661) by Dubinin, N. P.; and Goldat, S. Yu.

SO: Biological Journal (Biologicheskii Zhurnal) Vol. V, 1936, No. 5

USSR/Microbiology - Antibiosis and Symbiosis. Antibiotics.   F-2

Abs Jour   : Ref Zhur - Biol., No 3, 1958, 9843

Author   : Alikhanyan, S.I., Goldat, S.Yu., Klepikova, F.S.,
               Mindlin, S.Z.
Inst   : -
Title   : Utilization of Ethylenimine is Selection of Strains of
               Penicillin Producers.

Orig Pub   : Antibiotiki, 1957, 2, No 1, 33-36

Abstract   : In treatment of Penicillium chrysogenum spores by solu-
               tions of ethylenimine a considerable morphological vari-
               ability in degree of sporulation, form, size, wrinkling
               and colony coloration was noted among the surviving co-
               lonies. White, beige and lattuce-colored variants were
               isolated, and also variants without pigments, which did
               not form a golden-yellow pigment. Among colonies which
               survived after treatment of spores of strain D 2/3 P.
               chrysogenum by ethylenimine, a separation was conducted

Card 1/2

20-5-45/54

AUTHORS: Alikhanyan, S.I., Gol'dat, S. Yu., Teteryatnik, A. F.

TITLE: The Mutation Effect of a Combined Action of Ethylenimine and
Ultra-violet Rays upon Actinomycetes (Mutagennyy effekt kombini-
rovannogo deystviya etilenimina i ultrafioletovykh luchey na ak-
tinomitsety)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 115, Nr 5, pp. 1015 - 1017
(USSR)

ABSTRACT: Swanson proved in 1946 that the frequency of mutation of Asper-
gillus terreus and Neurospora crassa increases more intensively
after the treatment of their spores with small doses of bis-β-
chlorethylmethylamine, if they are subsequently exposed to vio-
let rays, than by an exposure to ultra-violet rays solely. It
was therefore presumed that the environmental factors can produce
an effect upon the sensitiveness of the cell with respect to the
radiated energy, viz. that the frequency of mutation is not only
a function of the absorbed energy. This induced the authors to
study the effect of the combined action of ethylenimine- and
ultra-violet rays upon various actinomycetes. They used Strepto-

Card 1/4

20-5-45/54

The Mutation   Effect of a Combined Action of Ethylenimine and Ultra-Violet Rays
                  upon Actinomycetes

          mycos aureo faciens No 112 and Str. grisous L5-1 (Actinmyces
          globisporus streptomycini). Both ethylenimine and a series of its
          derivates show an effective "cytotoxical" action. Part of the in-
          itial spore suspension of the first-mentioned kind of fungus was
          kept during 5 and 20 hours (respectively) in solutions of ethyl-
          enimine of various concentrations (1 : 5000 to 1 : 8000) and was
          subsequently exposed to rays. An other part of the suspension was
          first exposed to rays and subsequently treated with ethylenimine
          solution (as above). The test in respect to the produced effect
          upon the vitality are given in table 1. It may be seen from this
          that the decay of spores as a consequence of their exposure to
          rays, increases intensively, provided that they were subject to a
          previous treatment with ethylenimine - compared with their mort-
          ality in case of an inverse sequence of the said factors. The
          vitality of the spores also decrease 50 times by their exposure
          to rays solely, if their dose has been increased from 2000 to
          10.000 erg/mm^2. It falls 80 times, if the spores are first ex-
Card 2/4 posed to rays and subsequently treated with ethylenimine,- viz.

20-5-45/54

The **Mutation**   Effect of a Combined Action of Ethylenimine and Ultra-Violet Rays
            upon Actinomycetes

only four times, - and with an inversed sequence of the factors
(concentration 1 : 5000). The results obtained with Str. griseus
were similar (analogous). The test results in respect to the fre-
quency of mutation of the latter fundus in case of a combined
action, when ethylenimine was applied first, are given in table
2. This frequency rises rapidly in the case of the latter sequence
of treatments. The same results were obtained with Str. aureo
faciens. As to the mechanism of the rapid rise of the frequency
of mutations which were induced by ultra-violet rays, it may be
assumed that the sensibilization of the cells against ultra-violet
rays increases under the effect of ethylenimine. By this, the
action of the ultra-violet rays upon the nucleus is intensified.
It may also be presumed that these rays excite the molecule ethyl-
enimine and by this abruptly increase its reactivity. There are
2 figures, 2 tables and 1 Slavic reference.

Card 3/4

20-5-45/54

The **Mutation** Effect of a Combined Action of Ethylenimine and Ultra-Violet Rays
upon Actinomycetes

ASSOCIATION: **All-Union** Scientific Research Institute for Antibiotics
(Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov)

PRESENTED BY: I.L. Knunyants, Academician , March 18, 1957

SUBMITTED: March 16, 1957

AVAILABLE: Library of Congress

Card 4/4

GOL'DAT, S.Yu.

Induced and natural variability of Streptomyces aureofaciens
[with summary in English]. Antibiotiki 3 no.4:14-18 Jl-Ag '58
(MIRA 11:10)

1. Laboratoriya selektsii Vsesoyuznogo nauchno-issledovatel'skogo
instituta antibiotikov.
(STREPTOMYCES)

17 (1)
AUTHORS:

Gol'dat, S. Yu., Alikhanyan, S. I.

S07/20-125-5-49/61

TITLE:
The Effect of the Combined Application of Ultraviolet and
X-Rays Upon the Mutagenic Process in Streptomyces aureofaciens
LS-B16 (Vliyaniye kombinirovannogo deystviya ul'trafioletovykh
i rentgenovskikh luchey na mutatsionnyy protsess u
Streptomyces aureofaciens LS-B16)

ABSTRACT:
The mutagenic effectiveness of the rays mentioned in the
title can be modified by several additional factors and
conditions which influence the sensitivity of the cells to the
radiant energy (Refs 1-5 et al). In this connection it was
interesting to clarify the effectiveness of the interaction
between these two kinds of rays and to determine whether
irradiation with one of these factors influences the mutagenic
effect of the other one. The fungus mentioned in the title, a
biomycine producer which had been obtained by the authors due
the combined application of the two aforementioned kinds of
rays to the spores of the phylum LS-B536, was used for this
purpose. Ultraviolet rays were produced by two bactericide

Card 1/4

The Effect of the Co... ... ...
Ultraviolet and ... ... in Streptomyces aureofaciens LS-B16

Card 2/4

The effect of the ... in ... ...
Ultraviolet and X-Ray ... ... in Streptomyces aureofaciens LS-B16

... ...
... ...
irradiation (...--> ... ...
... ...
... ...
subsequent ... ...
mutations (?. ...
between the ir ... ...
of mutations m ... ...
interval of 3 h ... ...
combination. The ... ...
provisional. ... figure ... ...
1 of which is ... .

AFFILIATION: Vsesoyuznyy nauchno-... ...
               (All-Union ... ... Institut ...

Card 5/1

2) 12 2.0

S/560/61/000/010/01 /016
D298/D300

AUTHORS:
Glembotskiy. Ya. L., Prokof'eva-Bel govskaya
A. A., Shamina, Z. B., Gel'dar S. Yu.
Khvostova, V. V., Valeva, S. A., Eygnes, N. S.,
and Nevzgodina, L. V

TITLE:
Effect of cosmic flight factors on the heredity
and development of actinomycetes and higher
plants

SOURCE.
Akademiya nauk SSSR. Iskusstvennyye sputniki
Zemli no, 10. Moscow 1961 72-8

TEXT: The second cosmic space-ship was utilised to study
the combined genetic effect of cosmic flight on organisms   This
article deals with the study of the following cultures: actino-
myces erythreus, stems 2577 and 3594, and actinomyces strepto-
mycini Kras., stem !!! ? (LS-3). After the cosmic flight, the

Card 1/4

Effect of cosmic...

S/560/61/000/010/011/016
D298/D302

standards and experimental cultures were investigated according to: (1) vitality and (2) a microscopic characteristic of growth and development. The 2577 and 8594 stems differ by the sizes of their nuclear element in the spore and by their sensitivity to ultra-violet rays (UV). It is also assumed that they differ in their reaction to ionizing radiation. All the 4 tested stems were found to be sensitive to conditions of cosmic flight. The vitality (i.e., the number of spores which survived and developed colonies) of the radio-resistant act. erythraus 2577, as compared to the standards, increased 6 times; the no. 8594 decreased 12 times; the act. aureofaciens ... 229 (LSB-2291) dropped in vitality by about 75% on the average. In the roots of all 5 types of experimental seeds, the percentage of chromo some changes was somewhat increased. However, only in the case of 2 types was this increase statistically valid. In 3 types of plants, in increase of mitosis was noted. In the case where the percentage of anaphases with chromosome changes was found

Card 2/4

Effect of cosmic...

S/560/61/000/010/011/016
D298/D302

to be high (about 5%), the tempo of mitosis fell. The condi-
tions of cosmic flight stimulated the growth intensity compared
to the standards. The following microscopic morphology features
of the experimental cultures confirm this fact: (a) development
of a more basiphyllic and powerful gif, (b) growth of a thicker
intertwining of mycelia, (c) lengthy growth of well-developed
gifs. Data on the survival of the 8594 and 2577 stems are not
completely valid since the concentrations of the spore suspen-
sions of the control and experimental cultures were determined
visually from the suspension turbidity. The morphology changes
in the colonies were investigated on the act. erythreus 8594
and act. aureofaciens LSB-2201. Obtained data show that the
morphology changes in the actinomyces, both in the experiment
(cosmic flight) and control, lie within the same limits. The
cytology analysis of agricultural plant seeds affected by cosmic
flight was conducted by studying the chromosome impairment in
the ana- and telophases of the first mitosis. Obtained results

Card 3/4

Effect of cosmic ...

S/560/61/000/...
D298/D302

showed that in all the investigated plants there is a growth
increase of cells with chromosome changes, and in only 2 winter
wheat and Spartan's peas--is this increase statistically
valid. There are 4 figures, 2 tables and 5 references, 4 Soviet-
bloc and 1 non-Soviet-bloc. The reference to the English-
language publication reads as follows: S. B. Pipkin, W. N.
Sullivan, Aerospace Med., 30, 585, 1959.

SUBMITTED: May 3, 1961

Card 4/4

GOL'DAT, S.Yu.

Selection of Actinomyces aureofaciens (chlortetracycline producer)
by the use of mutagenic factors. Trudy Inst. mikrobiol. no.10:
159-163 '61.   (MIRA 14:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
          (ACTINOMYCES)   (AUREOMYCIN)

GOL'DAT, S.Yu.

Lependence of the effect of combined treatment of Streptomyces
aureofaciens by ultraviolet and X rays on the nature of treat-
ment. Dokl. AN SSSR 139 no.1:219-222 Jl '61.   (MIRA 14:7)

1. Vsesoyuznyy naucho-issledovatel'skiy institut antibiotikov
Ministerstva zdravookhraneniya SSSR. Predstavleno akademikom
V.N. Sukachevym.
        (ACTINOMYCES) (ULTRAVIOLET RAYS--PHYSIOLOGICAL EFFECT)
             (X RAYS--PHYSIOLOGICAL EFFECT)

TETERYATNIK, A. F.; GOLDAT, S. Yu.; MIKHAYLOVA, G. R. ; KOZACHENKO, V. I.

"Investigation of the action of phages on antibiotic-producing actinomycetes."

report submitted for Antibiotics Cong, Prague, 15-19 Jun 64.

All-Union Sci Res Inst of Antibiotics, Moscow.

ACCESSION NR: AP4020809   S/0297/64/009/002/0126/0129

AUTHOR: Gol'dat, S. Yu.; Sokolova, R.V.

TITLE: Combined action of ultraviolet radiation and ultrasonic
oscillation on Act. aureofaciens spores

SOURCE: Antibiotiki, v. 9, no. 2, 1964. 126-129

TOPIC TAGS: ultraviolet radiation, ultrasonic oscillation,
combined action, radiation and oscillation action sequence, Act.
aureofaciens spores, spore viability, spore variability, antibiotic
production activity

ABSTRACT: Several previous studies have shown that ultraviolet
radiation causes chromosome lesions and reduces the action of ultra-
sonic oscillation, while other sources show that ultrasonic oscilla-
tion increases chromosome movement. The present study was made to
determine the combined effect of these two factors on the viability
and variability of Act. aureofaciens spores. In one series of
experiments the spores were first ultraviolet-irradiated with 2000
or 4000 erg/mm^2 doses and then exposed to ultrasonic oscillation (no
details given). In the second series the order of these actions was

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ACCESSION NR: AP4020809

reversed. The effect of each action by itself was studied in control
groups. Survival and antibiotic production activity of the spores
served as indices. It was found that with the combined action of
ultraviolet radiation and ultrasonic oscillation both viability and
variability of Act. aureofaciens spores are affected by the sequence
of the actions. When spores are exposed only to ultrasonic oscilla-
tion, the number of low-activity variants sharply decreases. The
number of low-activity variants decreases when the spores are exposed
to ultraviolet irradiation after ultrasonic oscillation. But when
the spores are exposed to ultraviolet irradiation first and then to
ultraviolet oscillation, the number of high-activity variants
increases and the number of low-activity variants decreases. This
confirms literature data that preliminary ultraviolet radiation
reduces the effects of ultrasonic oscillation. The combined action of
ultraviolet radiation and subsequent ultrasonic oscillation may be
useful in selecting antibiotic producers and developing highly active
strains. Orig. art. has: 1 figure, 1 table.

ASSOCIATION: Vsesoyuzny*y nauchno-issledovatel'skiy institut
antibiotikov, Moskva (All-Union Scientific-Research Institute of
Antibiotics)

Card 2/3

GOL'DAT, S.Ya., ...ANOVA, ...; ...

Induced and natural variation in ... ... (... spheroides) which produces ... birth, ...
16%.

1. ... ...

GOL'DAT, S.Yu.

Effect of water radiolysis products on the viability and
variation of spores. Dokl. AN SSSR 154 no.2:457-459 Ja'64.

(MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.
Predstavleno akademikom Yu.A. Orlovym.

GOL'DAT, S.Yu.; SOKOLOVA, R.V.

Combined effect of ultraviolet rays and ultrasonic oscillations
on actinomyces aureofaciens spores. Antibiotiki 9 no.2:126-129
F 64.
(MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov,
Moskva.

BOLOT, A.A.; VARBUEVA, I.I.; GOL'DAT, S.Yu.; SAMOKHVALOV, G.I.

        Effect of different lipid sources on the content of ... in
        intestinal secretion... Prom. shyir. 6 no.4: 38-41 Ap
        '65.   (MIRA 18:4)

ACC NR: AP6035879   (A,N)   SOURCE CODE: UR/0413/66/000/020/0104/0104

INVENTOR: Gol'dat, S. Yu.; Sokolova, R. V.; Firsova, A. F.; Kadakova, L. P.; Parfenova, A. I.; Karakishisheva, T. I.; Stepanova, N. V.

ORG: none

TITLE: *Actinomyces aureofaciens* strain LSB-181, producing chlortetracycline and tetracycline. Class 30, No. 187242. [Announced by All-Union Scientific Research Institute for Antibiotics (Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 104

TOPIC TAGS: antibiotic, drug, Actinomyces aureofaciens, chlortetracycline, tetracycline

ABSTRACT: An Author Certificate has been issued for strain LSB-181 of *Actinomyces aureofaciens*. Light-sensitive mycelia in 5—6 mm colonies appear on its tenth day of growth on no. 12 organic agar medium at 28C. On no. 11 synthetic medium, dirty-white colonies 2.5—3 mm in diameter appear, and on pea medium, brown, raised, wrinkled, as porulating colonies seven mm in diameter are found. Milk is completely peptonized on the tenth day, and coagulation is noted on the 15th day, at which

Card 1/2   UDC: 615.45:615.779.931

GOLDAYEV, A.D., inzh.

Installation and maintenance of electric rail circuits. Put' i put.
khoz. no.2:34   P '58.   (MIRA 11:3)
                 (Railroads--Signaling--Block system)

GOLDAYEV, A.D.,inzh.

Installation and maintenance of forked track circuits. Put' i put.
khoz. no.3:37-38 Mr '58.   (MIRA 11:4)
        (Electric circuits) (Railroads--Track)

SOV 124 58-11 12477

Translation from: Referativnyy zhurnal Mekhanika 1958 Nr 11, p 76 (USSR)

AUTHOR: Goldayev, I. P.

TITLE: Optimal Parameters of the Combustion Process in Liquid-propellant
             Rocket Motors (Optimal'nyye parametry protsessa sgoraniya v
             zhidkostno-raketnykh dvigatelyakh)

PERIODICAL: Tr Khar'kovsk. aviats. in-ta, 1957 Nr 17, pp 261 274

ABSTRACT: A thermodynamic calculation was made of the combustion process
             of various fuels (kerosene gasoline ethyl alcohol hydrazine,
             aniline, liquid hydrogen) in combination with liquid oxygen and nitric
             acid. The results obtained permit a series of conclusions to be made
             such as the following: For every pressure in the combustion chamber
             there is a corresponding optimum excess oxidant coefficient α
             at which the maximum temperature is attained; as the pressure
             increases, the optimum value of α tends towards unity, which is
             explained by the suppression of dissociation at high pressures   The
             specific thrust of the rocket has its maximum value also at a well
             defined value of the coefficient α; however the optimum value of
Card 1/2   α for maximum specific thrust is considerably less than the

SOV 124-58-11 12477

Optimal Parameters of the Combustion Process in Liquid propellant (cont.)

optimum value of α for maximum temperature which is explained by the dependence of the molecular weight of the combustion products and the adiabatic exponent upon the excess-oxidant coefficient. The higher the heat value of the fuel the lower is the magnitude of the optimum values of the excess-oxidant coefficient. In working with widely-known fuels and oxidants the most efficient pressure in the combustion chamber lies between 20 and 50 kg-cm.

A. B. Ezrokin

Card 2/2

GOLDAYEV, I.P.; POLEVICHEK, Ye.P.; POPOV, N.N.; PERSHIN, A.P.

Jet piercing of hard rocks. Biul. tekh.-ekon. inform. no.4:3-4 '58.
(Rock drills)   (MIRA 11:6)

S/147/59/000/04/020/020
E031/E413

AUTHOR: Zolotukhin, V.K.

TITLE: The Scientific-Technical Conference at Khar'kov
            Aviation Institute

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya
            tekhnika, 1959, Nr 4, pp 161-165 (USSR)

ABSTRACT: In May 1959, the 16th Conference of Professorial and
            Teaching Staff took place. At a plenary session the
            following reports were read: "The XXI Congress of the
            Communist Party of the Soviet Union on the Further
            Development of the Two Forms of Socialist Ownership"
            by N.N.Aleksandrov, Director of the Chair Marxism-
            Leninism; "The Contemporary State of Rocket Technology"
            by Docent, Candidate of Technical Sciences I.P.Goldayev;
            "Efforts to Produce the First Aircraft Wholly
            Manufactured in China" by Docent, Candidate of Technical
            Sciences S.I.Kuz'min. The work of the Conference
            continued in twelve sections.
            Social Sciences Section   The following papers were read:
            Contemporary Bourgeois Philosophy" by Senior Instructor
Card 1/11   S.I.Epshteyn; "Discussion on Trade Unions in the

S/147/59/000/04/020/020
E031/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

Khar'kov Party Organization" by Assistant A.G.Levchuk;
"The Solution of the Housing Problem Under Socialism"
by Senior Instructor in the Department of Economical
Sciences, V.A.Yakovenko, "The Final and Complete
Victory of Socialism in the USSR" by Senior Instructor
V.A.Kravets, "The Problems of Socialist Competition at
the XII Congress of the Trade Unions of the USSR" by
Assistant Yu.N.Doroshenko,

Foreign languages Section. The following papers were read:
"Foreign Languages in the Life and Work of V.I.Lenin"
by Docent, Candidate of Philological Sciences
G.G.Pochentsov; "The Organization and Work of the
Departmental Section of Foreign Language Teachers at
Colleges which are not Specifically Language Colleges"
by Senior Instructor N.S.Shneye; "Work on Translations
at Higher Technical Colleges" by Assistant V.I.Kryzhenko;
"On the Principles of Constructing a Handbook of Technical
Texts - Educational Assistance for III-rd Course at
Aviation Colleges" by Assistants A.M.Gurevich and
L.A.Litovskaya

Card 2/11

S/147/59/000/04/020/020
E031/E413

The Scientific-Technical Conference at Kharkhov Aviation Institute

Mathematics and Mechanics Section. The following papers
were read: "A Spectral Representation of the Theory
of Axisymmetric Turbulence" by Candidate of Physical
and Mathematical Sciences G.M.Taranova; "Some
Evaluations for Functions with Positive Real Parts" by
Assistant G.S.Shpak; "Existence, Uniqueness and
Correctness Theorems for Mixed Systems of Functional
Equations" by Docent, Candidate of Physical and
Mathematical Sciences M.N.Tikhov; "On the Application
of Boll and Chebyshev Points to the Solution of Some
Problems in the Synthesis of Four Bar Linkages" by
Docent, Candidate of Physical and Mathematical Sciences
Ya.L.Geronimus; "The Influence of the Structural
Properties of Functions on the Convergence Almost
Everywhere of their Conjugate Fourier Series" by
Docent, Candidate of Physical and Mathematical Sciences
B.L.Golinskiv.
General Technological Section. The following papers were
read: "The Relation Between the Compton Length of Waves,
Card 3/11   the Length of de Broglie Waves and the Acceleration

S/147/59/000/04/020/020
E031/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

Potential for High Energy Particles" by Docent,
Candidate of Physical and Mathematical Sciences
I.Ya.Mints; "The Problem of Determining the Heat
Transfer Coefficient of Conductors" by Senior Instructor
P.P.Bezuglev, "An Electron-Graphical Method of
Investigating the Structure of Matter" by Assistant
I.Ya.Surovtsev; "On the Results of the VIIIth
Mendeleyev Congress of Chemists of the USSR" by
Docent, Candidate of Chemical Sciences E.I.Krech.
Electrical and Radio Technology Section. The following
papers were read, "On the Problem of the Optimum
Passage of Transients in an Electric Drive with a
Controlling Exciter" by Docent, Candidate of Technical
Sciences M.M.Perel'muter; "The Experimental Determination
of the Reactances in Synchronous Machines" by Senior
Instructor S.V.Khmel'nitskiy, "An Experimental Method
of Investigating Electric Fields" by Assistant
A.I.Lopatin, "A Discrete Transformer of Current into
Code Signals with Magne-c-Electric Comparison Units" by
Card 4/11   Docent, Candidate of Technical Sciences G.M.Butayev;

S/147/59/000/04/020/020
E031/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

"The Application of Infrared Instruments in Aviation"
by Docent, Candidate of Technical Sciences I.D.Artamonov.
General Engineering Section.
"The Adaptation of a Thermobaric Chamber to the
Simulation of the Sinking of a Mine Shaft in Quicksand
and Certain Results of Investigations to Determine the
Mechanical Characteristics of Sand at Different
Temperatures and Humidities" by Docent, Candidate of
Technical Sciences S.V.Blyashenko;   "Friction and
Abrasion in Cermets" by Docent, Candidate of Technical
Sciences O.I.Goldayeva;   "The Construction of Multi-
Satellite Planetary Gears" by Assistant V.A.Tkachenko;
"The Influence of Work Hardening on the Fatigue of
Threaded Connections" by Assistant V.M.Rydchenko;
"Investigation of Cermets Slide Bearings" by Assistant
A.S.Efoyan.
Strength of Aircraft Section.
"On the Theory of Bending of Thin-Walled Columns" by
Docent, Candidate of Technical Sciences L.P.Vinokurov;
"The Simulation of Static Experiments on Thin-Walled

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S/147/59/000/04/020/020
E031/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

Structures" by Candidate of Technical Sciences
L.A.Kolesnikov and Senior Instructor V.K.Zolotukhin;
"The Bending of Beams Framing an Opening" by
Candidate of Technical Sciences L.A.Kolesnikov;
"The Influence of the Rigidity of Ribs and Beams on
their Bending" by Assistant N.A.Shelomov;   "The
Calculation of the Bending of Rectangular Plates by
the Discrete Method" by Assistant Yu.P.Petrov;
"The Calculation of Cylindrical Shells by the Method
of Discrete Variables" by Aspirant N.I.Gur'yev.
Engine Construction Technology Section.
"The Choice of a Scheme for a Hydraulic Servo-System
for the Automation of Welding Processes" by Assistant
V.V.Balatskiy;   "An Investigation of the Process of
Polishing by an Abrasive Belt" by Senior Instructor,
Candidate of Technical Sciences V.N.Verezub;   "The
Investigation of the Operation of a Pneumatic-

Card 6/11   Hydraulic Plant" by Assistant V.I.Basteyev;

S/147/59/000/04/020/020
E031/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

"A Static Analysis and Calculation of the Accuracy of the Technological Processes of Machining" by O.M.Parkhomenko; "The Automatic Welding of Long Panels" by Candidate of Technical Sciences L.F.Kamskov; "Prospects in the Use of Specialised Computers for the Determination of the Optimum Geometry of Cutting Tools" by Docent, Candidate of Technical Sciences V.P.Kosharnovskiy; "The Spreading of the Experience of Innovators and the Classification of Organizational-Technical Measures in Machine Construction" by Senior Instructor M.M.Apanovich; "Features of Measurable Abrasion of a Cutting Tool in Fine Sharpening" by Assistant V.N.Malikov; "An Investigation of the Process of Compression at High Velocities of Deformation" by Docent, Candidate of Technical Sciences A.K.Bayev; "The Standardization of Vibration Effects on the Human Organism in Aircraft Production" by Senior Instructor V.D.Ivanov.

Theory and Construction of Aircraft Engines and

Card 7/11   Propellor-Driven Machines Section. "The Investigation

S/147/59/000/04/020/020
E031/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

of the Flow Between the Inlet and Outlet Valves of a
Turbine" by Instructor, Candidate of Technical Sciences
V.N.Yershov; "The Variation in the Stage Parameters of
an Axial Compressor in Accordance with the Size of the
Radial Clearance" by Assistant A.N.Anyutin; "On the
Problem of Non-Stationary Heat Transfer" by Assistant
S.D.Frolov; "The Influence of an Electric Field on
the Flame of a Burner" by Senior Engineer P.P.Kostenko;
"Calculation of the Temperature Compensation of
Capacitance Pressure Pick-Ups" by Assistant L.Ya.Astaf'yev.
Aerohydrodynamics Section.
"Ideal Hypersonic Flow Round a Body" by Assistant
V.I.Kholyavko; "The Control of the Boundary Layer of a
Wing by Perforation of the Leading Edge" by Assistant
Ye.P.Vachasov; "The Gas-Hydraulic Analogy and its
Application" by Senior Instructor D.A.Munshtukov;
"The Aerodynamic Investigation of Wing Profiles for
Small Reynolds Numbers" by Engineer Yu.F.Usik.
The Technology of Aircraft Construction and Metal Working
Section. "A New Model of the Plasticity of Metals" by

Card 8/11

S/147/59/000/04/020/020
E031/E413

The Scientific-Technical Conference at Khar'kov Aviation Institute

Instructor, Candidate of Technical Sciences
Yu.N.Alekseyev; "The Forging Extrusion of Large
Components from Sheet Metal" by Aspirant A.P.Barsukov;
"On the Problem of Constructing Second Order Curves in
Aircraft Construction" by Senior Instructor
M.A.Zaydenvarg; "The Electric Contact Welding of Thin
Pieces of Metal" by Assistant N.M.Tarasov; "The Influence
of Plastic Deformation on the Properties of Austenitic
Stainless Steel at Various Temperatures" by Assistant
N.V.Pisareva; "The Deformation of Non-Ferrous Metals
and Alloys at Low Temperatures" by Assistant
N.N.Lyulicheva; "The Investigation of Phase Changes in
Austenitic Steels Previously Deformed at Below Freezing
Point Temperatures" by Candidate of Technical Sciences
A.N.Chukhleb and Aspirant V.P.Martynov; "The Influence
of the Temperature and Velocity of Deformation on the
Phase Changes of Austenitic Steels" by Candidate of
Technical Sciences A.N.Chukhleb and Fellow V.P.Martynov;
"The Determination of Optimum Technical Grouping in the
Card 9/11   Design and Production of Aircraft" by Assistant

S/147/59/000/04/020/020
E031/E413

The Scientic-Technical Conference at Khar'kov Aviation Institute

Yu.A.Boborykin; "On the Use of Explosives in the
Technology of Drop Forging" by Assistant K.I.Zaytsev;
"Welding by Friction" by Assistant N.P.Ostrovskiy.
Structure of Aircraft Section.
"On the Problem of Protecting the Structure of Aircraft
from Aerodynamic Heating" by Docent P.V.Dybskiy;
"Passive Methods of Protection from Aerodynamic Heating"
by Candidate of Technical Sciences F.G.Yasinskiy;
"The Influence of the Parameters of a Thermally Isolated
Packet on Heat Transfer Characteristics" by Assistant
A.A.Kobylyanskiy; "Aircraft Structures Made from
Fibreglass Sheets" by Docent, Candidate of Technical
Sciences S.I.Kuz'min; "An Apparatus for Investigating
Repeated Static Loading and High Temperatures" by
Assistant L.A.Malashenko; "The Approximate Calculation
of the Weight Taking into Account the Technical Features
of the Aircraft Structure" by Candidate of Technical
Sciences L.D.Arson; "The Determination of Stresses in
a Shell as a Result of Riveting" by Assistant
Card 10/11 Yu.G.Fursa; "The Ultrasonic Altimeter (Sounding Device)"

GOLDAYEV, I.P.; POLEVICHEK, Ye.P.; POPOV, N.N.; MOTORENKO, A.P.; SFROGODSKIY,

Thermal drilling of frozen grounds. Biul. tekh. ekon. inform.
no.9:9-11 '59.   (MIRA 13:3)
            (Boring--Cold weather operation)

GOLDAYEV, I.F., kand.tekhn.nauk; POLEVICHEK, Ye.P., inzh.; POPOV, N.N.,
     inzh.; MOTORNENKO, A.P., inzh.; STROGODSKIY, A.V., inzh.

     Using reaction burners in working frozen ground. Mekh.stroi.
     16 no.11:21-23 N '59.   (MIRA 13:5)
          (Earthmoving machinery--Cold weather operation)

GOLDAYEV, Ivan Prokhorovich; POLEVICHEK, Yevgeniy Pavlovich; POPOV, Nikolay
        Nikolayevich; MOTORNENKO, Aleksey Petrovich; SERGGODSKIY, Al'bert
        Viktorovich; YAKHONTOV, A.D., otv.red.; SMOLDYREV, A.Ye., red.izd-va;
        LOMILINA, L.N., tekhn.red.; SHELYAR, S.Ya., tekhn.red.

        [Using thermal methods in working frozen ground] Razrabotka
        merzlykh gruntov termicheskim sposobom. Moskva, Gos.nauchno-tekhn.
        izd-vo lit-ry po gornomu delu, 1960. 46 p.   (MIRA 13:4)
                (Frozen ground)   (Boring)

GOLDAYE., I..., kand.tekhn.nauk, inzh.; [illegible], i..., inzh.

Thermal method of boring holes in frozen ground. Strci. i
dor. mash. 6 no.10:27-29 0 '61.   (MIRA 14:11)
                    (Boring machinery)
                    (Frozen ground)

AUTHORS: Goldayev, I. P., Yudin, A. I.

TITLE: Thermal cleaning of structure surfaces

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 20, 1961, 16, abstract
             20Ts157 ("Mekhaniz. str-va", 1961, no. 2, 20-21)

TEXT: The Khar'kovskiy aviatsionnyy institut (Khar'kov Aviation Institute)
has developed a new method of cleaning surfaces and designed a thermocleaning
tool. The method is based on the use of a high-temperature and supersonic gas
jet, produced by the thermocleaner operating on compressed air (6 atm) and
gasoline (10 atm). The jet is directed onto the surace covered with a layer of
organic matter at an angle of $40 - 70^{0}$. The effect of the jet is of short
duration and the temperature of the surface layer generally does not exceed $100^{0}C$.
The thickness of the layer being removed is 0.5 - 2 mm. The thermocleaner is
570 mm long, weighs 5 kg, gasoline consumption is 100 - 120 gram/min, air con-
sumption 5 m^{3}/min. The mean speed of the gas jet at the output is 800 - 1,000
m/sec, the operating temperature $750 - 800^{0}$ absolute. Organic matter in cracks

Card 1/2

Thermal cleaning of structure surfaces

S/123/61/000/020/035/035
A004/A101

3-5 mm wide are removed from a depth of 150 - 200 mm. Thermal cleaning is 3 times cheaper than manual cleaning. The authors present a description of the thermocleaner design and drawings.

Yu. Savvin

[Abstracter's note: Complete translation]

Card 2/2

GOLDAYEV, I.P., kand.tekhn.nauk; POLEVICHEK, Ye.P., kand.tekhn.nauk;
POPOV, N.N., kand.tekhn.nauk; SEROGODSKIY, A.V., inzh.

Double cascade air-operated flame drill for rock drilling without
the use of oxygen. Shakht.stroi. 6 no.11:4-6 N '62.   (MIRA 15:12)

1. Khar'kovskiy aviatsionnyy institut.
                    (Rock drills)

GOLDAYEV, I. [Holdaiev, I.], prof. (Khar'kov)

Thermal drill. Nauka i zhyttia 12 no.7:30-31 Jl '62.

(MIRA 16:1)

(Rock drills)

GOLDATIN, L. L.: ISKAKOV, A. I.

"Some experimental results in heat transfer ... ... in ... oil, and oil-transmission in jet ... carriers."

report submitted ... ... All-Union ... ... Heat Transfer, Minsk, ... May 19 ...

Institute, ... Inst.

0/586-67   RVT(l)/EVT(m)/EVT(m)

ACC NR: AP6030622

AUTHOR: Goldayev, I. P.; Ponshin, A. P.

CKG: None

TITLE: A stand for experimental investigation of processes which take place during intense heating

SOURCE: Samoletostroyeniye i tekhnika vozdushnogo flota, no. 4, 1966, 15-25

TOPIC TAGS: heating, gas jet, jet flow, test stand, combustion chamber test

ABSTRACT: The stand as described was and developed by the Kharkov Aviation Institute in 1967-1968 for studying the thermal effects of a high-temperature high-temperature jet on materials and for studying heat transfer. The stand is equipped with equipment for various applications. The parameters of the stand consist of a blower, control panel, supply system, instrumentation for monitoring the combustion process.

Card 1/2

L 07586-67

ACC NR: AP6030420   /

trols and signalling devices are on the horizontal panel. Separate supply systems are
provided for air and oxygen. The unit has a single fuel supply system which may be
used with various types of liquid fuel. The combustion chamber is water-cooled by an
open system with a flow rate of up to 125 l/min at a pressure of up to 16-16 atm sup-
plied by a valve-regulated gear pump. The recommended sequence of operations is dis-
cussed and it is shown that the thermal parameters of a gas jet may be determined in
a single experiment without direct measurements in the gas. Orig. art. has: 3
figures, 4 formulas.

SUB CODE:21,20/ SUBM DATE: None/ ORIG REF: 003

Card 2/2

GOLDAYEV, M., svarshchik

Device for repairing dragline bucket chains. Mn stroi. Mosk.
2 no.7:24 Jl '59.   (MIRA 12:10)

1.UM-22 trasta Mosstroymekhanizatsiya Nr.7.
        (Excavating machinery--Maintenance and repair)

KOSTYUK, D.I.; GOLDAYEVA, O.I.; YAKOVLEV, Yu.V.; TRET'YAKOVA, A.M., red.;
        TROFIMENKO, A.S., tekhred.

        [Manual for project work for course credit on the theory of
        mechanisms and machines] Rukovodstvo k kursovomu proektiro-
        vaniiu po teorii mekhanizmov i mashin. Khar'kov, Izd-vo
        Khar'kovskogo ordena Trudovogo krasnogo znameni gos.univ. in.
        A.M.Gor'kogo, 1959. 252 p.   (MIRA 12:12)
                (Mechanical engineering--Handbooks, manuals, etc.)

S/187/59/000/04/020/020
E031/E413

AUTHOR: Zolotukhin, V.K.

TITLE: The Scientific-Technical Conference at Kharkov
           Aviation Institute

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya
            tekhnika, 1959, Nr 4, pp 101-105 (USSR)

ABSTRACT: In May 1959, the 10th Conference of Professorial and
           Teaching Staff was held.

Card 3/11

Card 4/11

GOLDBACH, V.

"Photoelectric registration method for measuring the moment of friction.   Strojirenstvi,
Praha, Vol. 4, No. 7, July 1954, p. 554.

SO: Eastern European Accessions List, Vol. 4, No. 1 , Nov. 1954, ...

KOSTYUK, D.I.; GOLDAYEVA, O.I.; YAKOVLEV, Yu.V. Prinimali
        uchastiye: BOLOTOVSKI, I.P.; BOLOTOVSKIY, I.A.; MIKOV,
        V.E.; BAZILYANSKAYA, I.L., red.

        [Manual for the preparation of a course project in the
        theory of mechanisms and machines] Rukovodstvo k kursovomu
        proektirovaniiu po teorii mekhanizmov i mashin. Izd.2.,
        ispr. i dop. Khar'kov, Izd-vo Khar'kovskoge univ., 1961.
        265 p.   (MIRA 15:6)

GOLDBACH, V.

AUTHOR: Václav Goldbach   CZECH/37-59-2-18/20

TITLE: Professor Doctor of Natural Sciences Zdeněk Horák
            Celebrates his Sixtieth Birthday

PERIODICAL: Československý Časopis Pro Fysiku, 1959, Nr 2,
            pp 219-220

ABSTRACT: Bibliographical details are given on Professor Horák
            who since 1945 has been Professor of Physics in the
            Mechanical Engineering Faculty of the Technical
            University, Prague. In 1953 he applied Bose statistics
            on phonons and thus derived by a new method the Debey
Card 1/1   formula for the atomic heat of solids.
            There is 1 photograph

SUBMITTED: November 14, 1958

GOL'DBAUM, A.Ya., inzh.

Circuit for starting up an electric power station with complete loss of voltage. Energetik 8 no.1:9-10 Ja '60.
(MIRA 13:5)

(Electric switchgear) (Electric power plants)

ROMANOV, V.A., kand.tekhn.nauk; GOL'DBAUM, I.Ya., inzh.

Determining steady phase errors in follow-up systems converting
sinusoidal inputs into proportional variations of electric-
motor rotation speed. Izv.vys.ucheb.zav.; prib. no.5:24-31
'58.   (MIRA 12:6)

1. Leningradskiy politekhnicheskiy institut im. M.I.Kalinina.
                    (Electric controllers)

S/119/60/000/010/007/011
B012/B0c1

9.7000

AUTHORS: Gol'dbaum, I. Ya., Engineer, Zakharov, V. K., Candidate
              of Technical Sciences, Trunkin, N. T., Engineer

TITLE: Telecommunication System for Special Digital Computers

PERIODICAL: Priborostroyeniye, 1960, No. 10, pp. 18 - 21

TEXT: This is a description of a telecommunication apparatus, which is
used in a system of "centralized" computation and control of financial
operations. The present work was carried out at the laboratoriya avto-
matiki i telemekhaniki LPI im. M. I. Kalinina (Laboratory of Automation
and Telemechanics LPI imeni M. I. Kalinin) jointly with the konstruktor-
skoye byuro po proyektirovaniyu schetnykh mashin (Design Office for the
Planning of Computers). The mode of operation of this system is illus-
trated by a block diagram shown in Fig. 1. Ordinary blocks of computers
were used for it. Fig. 2 shows the circuit diagram of the receiving and
transforming apparatus, which is then described in detail. This circuit
diagram is characterized by the transformer Tp. (Tr.) which has a fer-

Card 1/2

9,7100

Telemetering systems for special

the buffer storage cell T from where it is fed to A, to receive the order
from *. The information in T is not erased thereby. The receiver- and
transformer device of the central machine C operates analogously to that
of the subscriber machine AM. Only the most specific blocks of the system
are described. Fig. 2 shows the circuit of the receiver- and transformer
device. It warrants the following: selection of the input pulses
according to the amplitude; according to polarity and duration; the
forming of two current pulse trains characterizing the code structure.
Separation according to amplitude and polarity is carried out by the
amplifier T_1 P_2 forming the positive pulses, and the amplifier T_3 T_4

forming the negative pulses. Due to the feedback (R_1 and R_2 respectively)

these amplifiers have a relay characteristic and the voltages at their
outputs do not depend on the amplitude of the input pulses, if the latter
exceeds a certain value. To the collector circuits of the transistors
T_1 and T_3, the differentiating transformers Tp_1 and Tp_4 are connected.

These eliminate the fronts of the pulses, the latter preparing the blocking
oscillators T_4 and T_5 (for the selection of the pulse duration) via the

Telemetering system for special

applications from T_1 and T_2. ... ... for this circuit is the transformer Tp_1 (Tp_2) with a ferrite with a rectangular hysteresis loop, making it possible to obtain a pulse at the output independent of the duration ... ... of the pulse at the input. The duration of the selection ... ... R_1, R_2 ... R_3, R_4 ... ... the potentiometer ... (Tp_3). The ... ... pulses are previously inverted by the transistor T ... and reach only then the input of the selector T_3 of the negative pulses. To avoid the development of spurious information pulses at the output of the circuit, the blocking oscillators T_1 and T_2 operate in response to the ... of the ... ... blocking oscillators T_1 and T_2, which in a normal state are blocked by means of the voltage U_{CM} and are only started on the main pulses. According to the amplitude, the spurious pulses are smaller by a multiple than the main pulses and are not able to start T_1 and T_2. Fig. ... shows the transmission device

(and ... ...).

Telemetering systems for special...   B110/5256

... ... forming code pulses ... of necessary ... ...
... . The code pulses of ... duration ... ...
... ... univibrators $T_1 - T_1$ and $T - T$, to the ...

... which ... input pulses arrive from the device for ... ...
parallel code into a serial code. At the output, ...
and negative pulses develops thereby, according to the ... ...
of ... univibrators. The working sequence is determined by ... ...
of the combination $(\frac{5}{2})$-code. In it, each numerical ... ...
by ... negative and ... positive pulses. Fig. 1 shows the circuit ... ...
control of the communication lines. The main element of ... ...
the magnetic amplifier with positive feedback, which is controlled ...
current ... ... through the lines. In the case of a short circuit ...
... ... of connection, the control current disappears and the ... ...
... extinguished. The operating coils of the magnetic amplifier ... ...
by a push-pull blocking oscillator with transistors. Characteristic of
this oscillator is the separation of the load circuit from the ... ...
circuit by means of the two transformers Tp_1 and Tp_2, ...

Card 5/10 ...

Telemetering systems for special...

to eliminate the no-load losses and to increase the efficiency
There are 3 figures and 4 tables.

The use of error ...

$$\left\| a_{\mu\nu} \right\| = \left\| \begin{array}{cccc} a_{11} & a_{12} & \cdots & a_{1\nu} \\ a_{21} & a_{22} & \cdots & a_{2\nu} \\ \cdots & \cdots & \cdots & \cdots \\ a_{\mu 1} & a_{\mu 2} & \cdots & a_{\mu\nu} \end{array} \right\|$$

where μ = the number of rows and ν = the number of columns. The expression becomes a single row matrix for the series memory arrangement and a single column matrix for the parallel type memories. Quite the introduction of additional symbols, the filing may be represented as an extension of the single row or column matrices. The number of these symbols depends on the number of symbols in the recorded information and on the number of errors being corrected. In reading the information from the memory will be read column sums as

Card 2/5

The use of error ...

added and compared with those written in the (μ + 1)-th row and
(ν + 1)-th column. If a single error has occurred then the row
sum will be out of coincidence in the row with distorted element
and in the column in which this element is distributed. Thus, the
element appearing at the cross-section of a known row and of a
known column must be corrected. This method makes it possible to
correct more than one error, provided they are distributed in rows
and columns of the same numerical order. Every row and column of
the matrix may be coded and checked according to the methods of
obtaining a code correcting a single, and detecting a double, er-
ror. Thus a large number of errors may be detected which are dis-
posed at the vertices of a polygon formed by the matrix elements.
From the point of view of reliability this method gives a high
coding efficiency. Formulae permitting evaluation of efficiency of
specific memory devices are derived. The problem of error correc-
tion methods and their effect on reliability is considered. /Ab-
stractor's note: Complete translation./

Card 3/3

S/119/62/000/010/001/003
D201/D308

AUTHORS: Gol'dbaum, I.Ya. and Zakharov, V.K.

TITLE: Interference-killing code for remotely controlled
               transmission systems

PERIODICAL: Priborostroyeniye, no. 10, 1962, 3-4

TEXT: The analysis of several codes shows that the code
"2 from 5" has a relatively high interference immunity and can there-
fore be used for the transmission of information. Two types of con-
verters of parallel 2 from 5 code into a series code, a converter of
binary-decimal code into a series 2 from 5 code and a receiving con-
verter of 2 from 5 code into an ordinary decimal code are described.
One of the first two is a ferrite matrix with rectangular hysteresis
loop. The other type utilizes the principle of "current steering".
The latter is stated to have the advantage of having no pulses of
complex shape at the output rails during the registration of the
code being formed and that current pulses of considerable magnitude
may be obtained (up to 1A with ferrite type ПП -24 (PP-24)). It

Card 1/2

Interference-killing ...

S/119/62/000/010/001/003
D201/D306

is stated that the circuits described can be used, after certain
modifications, for designing other types of code converters. There
are 2 tables and 3 figures.

Card 2/2

L 18967-65   EWT(d)/T/EWP(1)   Pac-4/Pg-4/Pae-2/Ph-4/Pj-4/P1-4   IJP(c)/ASD(a)-5/
RAEM(c)/ESD(c)/ESD(dp)/ESD(gs)

ACCESSION NR: AR5000806   S/0058/64/000/010/H018/H018

SOURCE: Ref. zh. Fizika. Abs. 10Zh133

AUTHOR: Gol'dbaum, I. Ya.

TITLE: Comparison of plane matrix codes

CITED SOURCE: Tr. uchebn. in-tov svyazi. M-vo svyazi SSSR, vyp.
19, 1964, 88-96

TOPIC TAGS: communication coding, error detection coding

TRANSLATION: It is shown that of all the control matrices which
are intended for the observation of random errors and information,
the quadratic matrix is the most effective. The advisability of
using code series with constant ratio as columns or rows of the
controlling matrix is investigated. Recommendations are made con-
cerning the formation of the most suitable variant of the control.

Card   1/2

L 18967-65
ACCESSION NR: AR5000806

matrix.   O

                          SUB CODE: DP   ENCL: 00

Card   2/2

L 45661-65   EED-2/EWT(d)/T/EWP(1)   Pg-4/Pj-4/Pk-4/Pq-4   IJP(c)   GG/BB

ACCESSION NR: AR5011510

UR/0372/65/000/002/V059/V059

SOURCE: Ref. zh. Kibernetika. Sv. t., Abs. 2V382

AUTHOR: Gol'dbaum, I. Ya.

TITLE: Concerning certain characteristics of matrix codes

CITED SOURCE: Tr. uchebn. in-tov svyazi. M-vo svyazi SSSR, vyp 20, 1964, 54-66

TOPIC TAGS: matrix code, binary code, error detection code, control matrix

TRANSLATION: The article considers binary codes with $m = m_1 \cdot m_2 \cdots m_t$ information symbols of the following type. The information symbols are arranged in a spatial matrix M of order t and dimensionality $m_1 \times m_2 \times \cdots \times m_t$. Further, a control matrix of order t and dimensionality $n = (m_1 + c_1)(m_2 + c_2)\cdots(m_t + c_t)$ is set up by adding c_i control symbols in each row of the i-th direction ($1 \leq i \leq t$) of the matrix M in accordance with one and the same law. It is shown that the following statements hold:

Card 1/2

L 45661-65

ACCESSION NR: AR5011510

Theorem 1. A control matrix of order t and dimensionality $(m_1 + c_1)$ x
x $(m_2 + c_2)$ x ... x $(m_t + c_t)$ with m information symbols and for fixed m, t, c_1,
c_2, ..., c_t has the minimum possible number of control symbols if and only if

$$\frac{m_1}{c_1} = \frac{m_2}{c_2} = \ldots = \frac{m_t}{c_t}. \qquad (1)$$

A control matrix satisfying relation (1) is called compact.

Theorem 2. Let two compact control matrices A and A' be of order t and t + s
and of dimensionality $(m_1 + c_1)$ x $(m_2 + c_2)$ x ... x $(m_t + c_t)$ and $(m_1' + c_1)$ x
x $(m_2' + c_2)$ x ... x $(m'_t + c_t)$ x ... x $(m_{t+1} + c_{t+1})$ x ... x $(m'_{t+s} + c_{t+s})$, re-
spectively, and let them have the following properties: 1) each contains m informa-
tion symbols, i.e., $m = m_1 \cdot m_2 \ldots m_t = m'_t \cdot m'_2 \ldots m'_{t+s}$; 2) $m_i \geqslant c_i$ and $m'_i \geqslant c_i$ for
$1 \leqslant i \leqslant t$ and $m'_i \geqslant c_i$ for $t + 1 \leqslant i \leqslant t + s$. Then the matrix A' contains more con-
trol symbols than A. Some corollaries of these theorems are further derived. A.
Korshunov.

SUB CODE: DP   ENCL: 00

Card 2/2 CC

GOL'DBAUM, I.Ya.

One feature of iterative codes. Radiotekhnika 20 no.2,
77-79 F '65.   (MIRA 18:4)

1. Deystvitel'nyy chlen Nauchno-tekhnicheskogo obshchestva
radiotekhniki i elektrosvyazi imeni Popova.

L 24274-66

ACC NR: AR6005247   SOURCE CODE: UR/0058/65/000/009/H012/H012

AUTHOR: Gol'dbaum, I. Ya.

TITLE: Criterion for estimating error correcting codes

SOURCE: Ref. zh. Fizika, Abs. 9Zh87

REF. SOURCE: Tr. Nauchno-tekhn. konferentsii Leningr. elektrotekhn. in-ta svyazi, vyp. 1, 1964, 99-106

TOPIC TAGS: error correcting code, data transmission, error correction

ABSTRACT: On the basis of a criterion that takes into account the efficacy with which redundance is used for error detection, a choice is given for the length of the computer "word" for a data transmission system with passive correction. [Translation of abstract]

SUB CODE   09

Card 1/1

L 29584 66   EWT(....)   ...   IJP(c)   GG/BP

ACC NR: AW 01.194   SOURCE CODE: UR/0274/65/000/010/A006/A007

AUTHOR: Gol'dberg, L. ...

TITLE: Criteri...   ...coding codes (y)

SOURCE: Ref. ...   ...tyka', Abs. 10A44

REF SOURCE: Tr. ...   ...l.odngr. elektrotekhn. in-ta svrani.

vyp. 1, 19.., ...-...

TOPIC TAGS: ...   ...n, ...

ABSTRACT: ....h is selected for a passive-correction-type data
system. A criteri... ...... taken into account the efficiency of using
redundan... for error c..... ...n. The criterion is connected with an absolute actual
efficiency η and the ... . of n, probability q of passing the symbol
throu... .... .n the number of words C which is
transm... d during ... . also on the absolute probability of

appearan.... of ... ... redundancy R: $\eta = ... R[1 - \eta(0 - ...)...]$

In the c urse of ... .mula $\eta = f(q, n, \theta)$, some conclusions are
made about the ... . various combinations of these parameters.
The concepts of ... ... efficiencies of the coded-information
protection ar... i... .... table. Bibliography of 12 titles. L. B.
[Translation of a... ...

Card 1/1 ...   UDC: 621.391.15..

L 33203-66   EWT(l)   IJP

ACC NR: AT6006271   SOURCE CODE: UR/0000/64/000/001/0099/0106

AUTHOR: Gol'dbaum, I. Ya.

ORG: none

TITLE: A criterion for the evaluation of error-detecting codes

SOURCE: Leningrad. Elektrotekhnicheskiy institut svyazi. Nauchno-tekhnicheskaya konferentsiya. Trudy, no. 1, 1964, 99-106

TOPIC TAGS: error detecting code, error correcting code, coding evaluation

ABSTRACT: It is noted that the emergence of different codes featuring the detection and correction of errors has raised the question of the development of an engineering criterion which may be employed in an objective comparison of such codes. The expression proposed by the author for error-detecting code efficiency has the form

$$\eta = \frac{1}{R}\ \log\ \frac{1}{P_H}\ \ ,$$

Card   1/2

L 33303-66

ACC NR: AT6006271

where R is the redundancy of the code. The paper deals fundamentally with a data-transmission system with passive correction. Such a system provides for a considerable reduction in time losses entailed in re-interrogation of garbled information. On the basis of a criterion which takes into account the efficiency of redundancy utilization for error detection, the author justifies a selection of machine "word" length for an idealized data-transmission system with passive correction. Orig. art. has: 1 figure, 1 table, and 19 formulas.

SUB CODE: 09 / SUBM DATE: 08Dec64 / ORIG REF: 009 / OTH REF: 003

Card 2/2

16(1)

AUTHOR: Gol'dbaum, Ya.S. (Leningrad)   SOV/40-22-4-16/26

TITLE: On the Transformation of the Secular Equation (K preobrazovaniyu vekovogo uravneniya)

PERIODICAL: Prikladnaya matematika i mekhanika, 1958, Vol 22, Nr 4,
            pp 539 - 541 (USSR)

ABSTRACT: Starting from considerations of the general theory of the integration of systems of linear differential equations Krylov gave a method of transferring the determinant

$$|A - \lambda E|$$

into a form, so that the characteristic exponent λ only occurs in the elements of one line. The algebraic performance of this Krylov transformation, however, was not very easy. In the present paper therefore an attempt is made to develop a new, completely elementary method for a transformation. The author states that this method represents the clearest and algebraically simplest one among the methods which became known in this domain.

If A is a real matrix of order n and x a real row vector,

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On the Transformation of the Secular Equation   SOV/40-22-4-16/26

then by application of the row vectors :

$$x, \ Ax, \ A^2 x, \ \ldots, \ A^{n-1} x$$

and the matrix :

$$X = \| x, \ Ax, \ A x, \ \ldots, \ A^{n-1} x \|$$

one can find a form :

$$|A - \lambda E| = \frac{1}{X} \begin{vmatrix} 1 & \lambda & \lambda^2 & \ldots & \lambda^n \\ x & Ax & A^2 x & \ldots & A^n x \end{vmatrix}$$

for the secular equation. As it was required the characteristic exponent λ only occurs in the elements of the first line. This transformation is brought into a simpler form by another re-presentation of the vector $A^n x$ which can be also enlarged and applied to special cases.

There are 5 Soviet references.

SUBMITTED: January 3, 1955

Card 2/2

GOL'DBERG, A.; RYNKOVSKIY, A.

Improve the work of seed cleaning stations. Muk.-elev.prom. 20
no.10:8-9 O '54.   (MLRA 7:12)

1. Kiyevskaya normativno-issledovatel'skaya stantsiya Z gotzerno.
(Seeds -Cleaning)

SAYENKO, G.; GOL'DBERG, A.

Simplified method for calculating the pay of stokers and
specialists in grain drying. Muk.-elev.prom. 26 no.7:17-19
Jl '60.   (MIRA 13:8)

1. Zaveduyushchiy Kiyevskoy normativno-issledovatel'skoy stantsiyey
(for Sayenko). 2. Starshiy inzhener Kiyevskoy normativno-
issledovatel'skoy stantsii (for Gol'dberg).
        (Grain--Drying)   (Wages)

Belinskii, P. P., and Gol'dberg, A. A. Application of a theorem on conformal mapping to questions of invariance of defects of meromorphic functions. Ukrain. Mat. Ž. 6, 263-269 (1954). (Russian)

An example is given of a meromorphic function of finite order for which the defect is not invariant under a translation of the origin; this answers a question raised by Valiron [C. R. Acad. Sci. Paris 225, 556-558 (1947); MR 9, 139]. If E is some set in $1 < r < \infty$, $\chi(t, E)$ the characteristic function of E, and cE the complement of E with respect to $1 < r < \infty$, it is said that $E \varepsilon A$ if

$$\limsup (\log r)^{-1} \int^r \chi(t, E)\, dt < \infty.$$

It is proved that, for a meromorphic function of finite order, the quantities

$$\sup_{cE\varepsilon A} \liminf_{r\varepsilon E, r\to\infty} \frac{m(r, a)}{T(r)} \quad \text{and} \quad \inf_{cE\varepsilon A} \limsup_{r\varepsilon E, r\to\infty} \frac{m(r, a)}{T(r)}$$

are invariant under translation. It is also shown that, in order that the defect (in the sense of either Nevanlinna or Valiron) of a meromorphic function be invariant under a pseudo-analytic transformation, it is sufficient that either $0 < K_1 < T(r)/r^\alpha < K_2 < \infty$ or $0 < K_1 < N(r, a)/r^\alpha < K_2 < \infty$.

A. J. Lohwater (Helsinki).

Gol'berg, A.A.

Gol'berg, A. A. On a problem in the theory of distribution
of values of meromorphic functions. Dopovidi Akad.
Nauk Ukrain. RSR 1954, 3–5 (1954). (Ukrainian.
Russian summary)

Announcement of the results of the paper reviewed below.

A. J. Lohwater (Helsinki).

Gol'berg, A. A. On the inverse problem of the theory of
the distribution of the values of meromorphic functions.
Ukrain. Mat. Ž. 6, 385–397 (1954). (Russian)

The author constructs a class of Riemann surfaces having
a finite number of "almost periodic" ends in order to solve
the problem of finding a meromorphic function having given
defects $\delta(a_k)$ on a given sequence of points $\{a_k\}$. The re-
strictions on the $\delta(a_k)$ are that (1) $\sum \delta(a_k) < 2$ and (2) all
but a finite number of the $\delta(a_k)$ are zero. This result extends
the work of Le Van Thiem [Comment. Math. Helv. 23,
26–49 (1949); Ann. Sci. École Norm. Sup. (3) 67, 51–98
(1950); MR 11, 22, 12, 17], who required, in addition, that
the $\delta(a_k)$ be rational.

A. J. Lohwater (Helsinki).

GOL' DBERG, A. A.

USSR/ Mathematics - Analytical functions

Card 1/1   Pub. 22 - 3/47

Authors   : Gol'dberg, A. A.

Title   : The approach of algebraic branching points of a Riemann surface and its
             effect on the order of development of the mapped meromorphic function

Periodical : Dok. AN SSSR 98/5, 709-711, Oct 11, 1954

Abstract   : The idea of a meromorphic function, which reflects (maps) a surface on a
             Riemann surface having n directly critical points, is explained. A class
             of critical points (K-points), much broader than the class of directly criti-
             cal points, was introduced and their functions explained. The effect of ap-
             proaching algebraic branching points of a Riemann surface, on the development
             of meromorphic functions, is analyzed. Six references: 1-USSR and 5-Japan-
             ese (1941-1943).

Institution : ...

Presented by: Academician M. A. Lavrentyev, May 20, 1954

USSR/Mathematics - Mero-morphic functions

Card 1/1 : Pub. 22 - 3/44

Authors : Gol'dberg, A. A.

Title : Defects of mero-morphic functions

Periodical : Dok. AN SSSR 98/6, 893-895, October 21, 1954

Abstract : A series of theorems are presented which intend to prove, by constructing a simple example, that a mero-morphic function of a fixed finite order may have any arbitrary finite number of defects. Eight references (1929-1952).

Institution : .....

Presented by: Academician M. A. Lavren'ev, May 29, 1954

GOL'DBERG, A. A.

GOL'DBERG, A. A.   __"Certain Problems in the Theory of the Distribution of
Values of Merom____ ___ Functions." (Dissertation for ___ ___ ___ ___
Mathematics Defende_ ___ ___ ___ Winter Semes___ ___ ___ ___ ___ ___ ___
Univer___ ___, ___, L'vov__ ___ ___ ___ ___ ___ ___, ___, 19__

So: __Bulletin_ Lab__ ___, No. __, 1 __ __ __

* For the listing __ ___ ___ ___ ___ ___ ___ ___ ___ ___

GOL'DBERG, A.A.

Single-valued integrals of differential equations of the first
order. Ukr. mat. zhur. 8 no.3:254-261 '56.   (MLRA 10:9)
            (Integrals)   (Differential equations)

FREDHOLM, A.A.

Some inequalities connected with logarithmic convex functions
(with summaries in Russian and English). Dop. AN URSR no.3:227-23
'57. (MIRA 10:9)

1. Uzngorods'ki derzhavniy universitet. Predstavleno akademikom
Akademii nauk URSR B.V.Gnedenko.
(Functions)

GOL'DBERG, A. A.

20-2-3/60

AUTHOR: Gol'dberg, A. A.

TITLE: The Evaluation of the Sum of the Defects of a Meromorphous
            Function of the Order Smaller Than One (Otsenka summy
            defektov meromorfnoy funktsii poryadka men'she yedinitsy)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 114, Nr 2, pp.245-245
            (USSR)

ABSTRACT: The author here denotes with $\delta(a)$ the Nevanlinna defect in
            the point a of the meromorphous function in a finite z plane.
            R. Nevanlinna showed the following: For meromorphous functions
            of not full order ρ the sum $\delta(a) + \delta(b)$ is lower at all
            a $\neq$ b than a certain constant which is lower than 2 and de-
            pends only on δ. The corresponding evaluations were also
            given by R. Nevanlinna. For the case $0 \leqslant \rho \leqslant 1$ S. M. Shah,
            Math. Student, Vol. 12, p. 67 (1944), gave precise data con-
            cerning the evaluations by Nevanlinna and showed that
            $\delta(a) + \delta(b) \leqslant 1 + \rho$ applies. The present report gives
            proof of the **inequalities:**

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2C-2-3/60

The Evaluation of the Sum of the Defects of a Meromorphous Function of
the Order Smaller Than One

$.0 < \rho < 1/3$

$$\delta(a) + \delta(b) \leqslant \begin{cases} 1 \\ 2 - 2^\rho \end{cases} \sqrt{\pi}\,\Gamma(1-(\rho/2))\ \Gamma^{-1}((1-\rho)/2),\ 1/3 < \rho < 1,$$

According to the opinion of the author this is a more typical
evaluation than the one by S. M. Shah. Through probably the
evaluation written down above is not one of the best, it
may not be far from it. Proof is then carried out step by
step. There 1 figure, and 7 references, 5 of which are
Soviet.

ASSOCIATION: State University, Uzhgorod
                (Uzhgorodskiy gosudarstvennyy universitet)

PRESENTED: December 7, 1956, by M. A. Lavrent'yev, Member of the Academy

SUBMITTED: September 8, 1956

AVAILABLE: Library of Congress

Card 2/2

SOV/140-58-3-8/34

AUTHOR: Gol'dberg, A. A.

TITLE: On Entire Solutions of Partial Differential Equations (O tselykh resheniyakh uravneniy s chastnymi proizvodnymi)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1958, Nr 3, pp 62-66 (USSR)

ABSTRACT: The author considers entire solutions $u = u(z,w)$ of the equation

$$(1) \quad P\left(z, w, u, \frac{\partial u}{\partial z}, \frac{\partial u}{\partial w}, \ldots, \frac{\partial^q u}{\partial z^q}, \frac{\partial^q u}{\partial z^{q-1} \partial w}, \ldots, \frac{\partial^q u}{\partial w^q}\right) = g(u) \ ,$$

where P is a polynomial and the coefficients are complex. Theorem: In order that (1) possesses an entire transcendental solution, it is necessary and sufficient that $g(u)$ is a polynomial, the degree of which is $\leq$ the degree of P (concerning the totality of the arguments). If in particular the left side is linear in u and in its derivatives, then it must be $g(u) = Au + B$.
The proof is based on some lemmata in which well-known properties of simple power series are transferred to double series.

Card 1/2

On Entire Solutions of Partial Differential Equations   SOV/140-58-3-8/34

There are 7 non-Soviet references, 4 of which are German,
2 French, and 1 English.

ASSOCIATION: Uzhgorodskiy gosudarstvennyy universitet (Uzhgorod State
University)

SUBMITTED: October 29, 1957

Card 2/2

16(1)

AUTHOR: Gol'dberg, A. A.   SOV/21-11-2-12/17

TITLE: Remark on Blaschke-Products for the Halfplane

PERIODICAL· Ukrainskiy matematicheskiy zhurnal, 1959, Vol 11, Nr 2,
pp 210-213 (USSR)

ABSTRACT: Let

$$B(z) = \prod_{k=1}^{\infty} \frac{1 - a_k^{-1} z}{1 - \bar{a}_k^{-1} z}, \quad a_k = r_k e^{i\theta_k}, \quad 0 < \theta_k < \pi, \quad r_k \to \infty,$$

and

$$m(r,f) = \frac{1}{2\pi} \int_0^{2\pi} \ln^+ |f(re^{i\varphi})| \, d\varphi.$$

Theorem: For all $r > 0$ it holds:

$$m(r,B) = O\left(r \left[1 + \ln^+ \frac{n(\lambda r) - n(\lambda^{-1} r)}{r} \right] \right)$$

where λ is an arbitrary number > 1.

Theorem: In order that $m(r,B) = O(r)$ holds for all $r > 0$ the
convergence of

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Remark on Blaschke-Products for the Halfplane

$$\sum_{k=1}^{\infty} \frac{\sin \theta_k}{r_k} \ln \frac{2}{\sin \theta_k}$$

is sufficient.
A further theorem contains assertions on Blaschke-Products of finite order.
The author mentions B.Ya.Levin, and I.V.Ostrovskiy.
There are 3 references, 1 of which is Soviet, 1 German, and 1 French.

SUBMITTED: September 23, 1957 (Uzhgorod)

Card 2/2

16(1)

(573.

AUTHOR: Gol'dberg, A.A. (Uzhgorod)   SOV/41-11-4-10/15

TITLE: On the Set of Defect Numbers of Meromorphic Functions of
             Finite Order

PERIODICAL: Ukrainskiy matematicheskiy zhurnal, 1959, Vol 11, Nr 4, pp 452-443
             (USSR)

ABSTRACT: In his publication [Ref 4] the author constructed a meromorphic
             function of first order with infinitely many defect numbers. In
             the present paper a proof of [Ref 4] is completed (according
             to a hint of Professor B.Ya Levin) and a meromorphic function
             of arbitrary finite positive order β is constructed the set of
             defect numbers of which is identical with an arbitrary given
             finite or countable point set of the w-plane.
             There are 4 references, 1 of which is Soviet, 1 French, and
             2 Finnish.

SUBMITTED: February 17, 195_

Card 1/1

GOL'DBERG, A.A.

Elementary comments on formulas for determining the order and
type of entire functions of several variables. Dokl.AN Arm.
SSR 29 .no.4:145-151 '59.   (MIRA 13:4)

1. Uzhgorodskiy gosudarstvennyy universitet. Predstavleno
akademikom AN Armyanskoy SSR M.M.Dzhrbashyanom.
          (Function of complex variables)

16(1)

AUTHORS: Bitlyan,I.F., and Gol'dberg,A.A.   SOV/44-59-15-3/16

TITLE: The Theorems of Wiman-Valiron for Entire Functions of Several
              Complex Variables

ABSTRACT: §1: On the base of the usual definition, the well-known theorems
              of Wiman on the connection between the maximal value of an
              analytic function and the greatest term are transferred to
              functions $f(z,w)$. It is stated that if the manner is not
              restricted in which the space is exhausted by the cylinders
              $|z| \leqslant r_1$, $|w| \leqslant r_2$, then the transfer can be made only under very
              incisive restrictions of the form of the double series (the
              transfer is not valid e.g. for polynomials!). In the §§ 2 and 3
              it is stated that a better transfer of Wiman's results is
              possible if one restricts oneself to exhaustions of the type
              $|z| \leqslant Ar$, $|w| \leqslant Br$ and the notion of the highest term is somewhat

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