LEUKHINA, G.N.; SEMENOVA, O.A.; AYZENSHTAT, B.A., otv. red.;
  LIVSHITS, B.Kh., red.; NIKOLAYEVA, G.S., tekhn.red.

[Climatic description of the plains and foothills in
southern Tajikistan] Klimaticheskoe opisanie ravnin i
predgorii IUzhnogo Tadzhikistana.   Leningrad, Gidro-
meteoizdat, 1963. 82 p.   (MIRA 16:11)
        (Tajikistan--Climate)

AY ANSIHAT, B. .

Daily course and comparative characterization of the turbulence coefficient based or some regions in Central Asia. Trudy Sred.-Az. nauch.-issl. gidrometeor. inst. no. 16:50-60 '63.

(MIRA 17:6)

AYZENSHTAT, B.A., kand. fiz.-mat. nauk

Method of calculating some bioclimatic indexes. Meteor. i
gidrol. no.12:9-16 D '64   (MIRA 18:1)

1. Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorolo-
gicheskiy institut.

AYZENSHTAT, B.A.

Ivan Nikolaevich IAroslavtsev; 1889 - ; on his 75th birthday.
Meteor. i gidrol. no.12:57-58 D '64   (MIRA 18:1)

SEMENOVA, O.A.; LEUKHINA, G.N.; AYZENSHTAT, B.A., red.;
SLABKOVICH, G.I., red.

[Climatic description of Gissar District] Klimaticheskoe
opisanie Gissarskogo raiona. Leningrad, Gidrometeoizdat,
1965. 66 p.   (MIRA 18:3)

AYZENSHTAT, B.A.

Method of calculating the components of the radiation balance of a
mountain valley. Trudy Sred.-Az.nauch.-issl. $\blacksquare$rometeor. inst. no.18:
3-47 '64.
(MIRA 17:10)

AYZENSHTAT, B.A.

Methods of calculating and results of determining some
bioclimatic characteristics. Trudy Sred.-Az. nauch.-issl.
gidrometeor. inst. no.22:3-41 '65.

Incidence of streams of diffuse radiation on vertical and
horizontal surfaces under conditions of city building.
Ibid.:42-50   (MIRA 18:5)

AUTHOR: Ayzenshtat, B. A.

ORG: none

TITLE: Improving the Yanishevskiy balancemeter

SOURCE: AN SSSR. Mezhduvedomstvennyy geofizicheskiy komitet. Meteorologicheskiye.
issledovaniya, no. 15, 1966, 69-71

TOPIC TAGS: balancemeter, wind velocity, thermal heterogeneity, radiation balance/
Yanishevskiy balancemeter

ABSTRACT: The main advantage of the Yanishevskiy thermoelectrical balancemeter is
its very small dependence on wind velocity. At the same time, the instrument has.
low inerting and is, therefore, affected strongly by the thermal heterogeneities of
the air. This is reflected in considerable instability of daytime readings. In
order to reduce this defect, it was suggested that the mass of the reception surfaces
be increased by glueing two copper plates 1.0-mm thick to these surfaces. As a
result of this alteration, the inertia of the balancemeter is increased to 60 sec,
the increase in the dependence on the wind velocity is insignificant, and the
oscillations of the hand of the galvanometer, connected to the balancemeter, decrease
8—10 times. These changes facilitated the observations and made it possible to use

Card   1/2

ACC NR: AT6031973

the improved balancemeter as a detector of radiation balance. Orig. art. has:
1 figure and 1 table.

SUB CODE: 04   SUBM DATE: None

Card   2/2

AYZENSHTAT, B. B.

AYZENSHTAT, B. B., and KIRILLOVA, T. V.

"Comparative Characteristics of the Components of the Radiation Balance of a Semidesert and a Cotton Field."
Dokl. AN Uzbek SSR, No 2, pp 37-41, 1954

The expedition to Golodnaya Steppe (1952) studied the peculiarities of the radiation balance and its components for particular days in irrigated cotton fields and a semidesert. At noontime the radiation balance of cotton field reaches 0.9-1.0 cal./cm^2/min, exceeding the balance of a semidesert by about 0.2 cal/cm^2/min. The authors draws the conclusion that irrigation and cultivation are factors which influence the microclimate. (RZhGeol, No 2, 1955)

SO: Sum, No 606, 5 Aug 55

AYZENSHTAT, B. I.

KHUDUSHIN, Fedor Semenovich, kand.filosof.nauk; KONONOV, V.A., red.;
AYZENSHTAT, B.I., red.; SAVCHENKO, Ye.V., tekhn.red.

[Communist labor; overcoming fundamental differences between
intellectual and manual work] Kommunisticheskii trud; o pre-
odolenii sushchestvennykh razlichii mezhdu umstvennym i fizi-
cheskim trudom. Moskva, Izd-vo "Znanie," 1960. 45 p. (Vse-
soiuznoe obshchestvo po rasprostraneniiu politicheskikh i
nauchnykh znanii. Ser.2, Filosofiia, no.1)   (MIRA 13:2)
                    (Work)

SHRAYBMAN, S.S.; AYZENSHTAT, I.A.

Removal of chlorine from hydrogen chloride.   Patent U.S.S.R. 78,454, Dec. 31, 1949.
(CA 47 no.20:10815 '53)

AYZENSHTAT, I.A.

Gold-bearing metallogenetic zones and genetic types of endogenetic
gold deposits in Central Asia. Uzb. geol. zhur. no.1:63-75 '59.
(MIRA 12:7)

1.Glavnoye upravleniye geologii i okhrany nedr pri Sovete Ministrov
UzSSR.
    (Soviet Central Asia--Gold ores)

AYZENSHTAT, I.A.

The S-765 paint-spraying gun. Biul. tekh.-ekon. inform. Gos.
nauch.-issl. inst. nauch. i tekh. inform. 17 no.2:38-40 '64.
(MIRA 17:6)

14(10)   SOV/95-59-3-7/14

AUTHOR: Ayzenshtat, I.D., Engineer

TITLE: Manufacture and Assembling of pre-Fabricated Reinforced Con-
               crete Sections in the Construction of Compressor Stations (Iz-
               gotovleniye i montazh sbornykh zhelezobetonnykh konstruktsiy
               na stroitel'stve kompressornykh stantsiy)

PERIODICAL: Stroitel'stvo truboprovodov, 1959, Nr 3, pp 22-23 (USSR)

ABSTRACT: The article describes how for the first time the method of pre-
               fabricated reinforced concrete parts was applied on the con-
               struction site of a gas compressor station on the Stavropol'-
               Moscow gas pipeline. Though the project called for mono-
               lithic structure a number of items were changed to pre-
               fabricated reinforced concrete structure. In view of the
               prevailing (-20°C) cold, special precautions had to be taken
               to preheat water, sand and cement, which was supplied from
               the bunker at +40°C. Concrete was poured at not less than
               +15°C. For the reinforced concrete columns 6 forms were made,
               of which 4 were kept in steam chambers and 2 were provided
               with electric heating system. In the absence of cranes the
Card 1/2   setting-up of columns, girders, etc had to be accomplished

AYZENSHTAT, I.I.   DECEASED   1962/6
                                    C' 1961

                                    SEE ILL

HEAT ENGINEERING

SOKOLOV, Yu.N.; AYZENSHTAT, L.I.

Methods and devices for investigating spindle units of machine
tools. Stan.i instr. 33 no.11:14-17 N '62.   (MIRA 15:11)
(Spindles (Machine tools)—Testing)

AYZENSHTAT, I.I., inzh.

Dynamic properties of the feed control system of once-through boilers according to heat-water ratio. Energomashinostroenie 7 no.11:5-9 N '61.   (MIRA 14:11)

            (Boilers)
            (Automatic control)

AYZENSHTAT, L. I.

Aizenshtat, L. I. (Physics) Qualitative determination of the disposition of limit cycles in second order systems. P. 53

Chair of Vibrations
Oct. 4, 1950

SO: Herald of the Moscow University, Series on Physics-Mathematics and Natural Sciences, No. 3, No. 5, 1951

BESSONOV, Lev Alekse;revich; AYZENSHTAT, L.I., red.; BOLUNOV, N.I., tekhn.
red.

[Self-sustaining oscillations in electric circuits containing
steel] Avtokolebaniia (avtomoduliatsiia) v elektricheskikh
tsepiakh so stal'iu. Moskva, Gos. energ. izd-vo, 1958. 303 p.
                                (Electric circuits)   (MIRA 11:9)

VOROB'YEVA, T.S.; AYZENSHTAT, L.I.

Equipment for measuring vibrations of machine tools under machine-shop conditions. Stan. i instr. 35 no.7:27-31 Jl '64.
(MIRA 17:10)

AYLENSHTAT, N. D.

Ayzenshtat, V. D. "On a class of linear operators." Uchenye zapiski Moskov. Gos. Univ. 133, Matematika, Tom II, 23–36 (1948). (Russian)

The article deals with the following generalization of the Dirichlet problem. Every interior point P of a bounded, connected, n-dimensional region G is the center of a sphere $\sigma(P)$, whose radius $h(P)$ is continuous in P and tends to zero for points near the boundary Γ. A suitably normalized function $A(P)$, regular and strictly positive in $G + \Gamma$, defines the linear operator ...

... continuous on the boundary Γ, a function ...

such that (i) in G, ...

$$ \lim u_r(P) = u^{\ast \ast}(Q) $$

The method used by the author is a generalization of the method of Perron [Math. Z. 18, 42–54 (1923)]. A function ... superharmonic H, for a given system of spheres ... an upper function ... $\geq$ a given boundary ... but $\inf u_r/p \geq F(Q)$. Lower functions are analogously defined in terms of a subharmonic functions. The author shows that the infimum u_r of the set of upper functions is harmonic (that is, assumes (i) above and is equal to the infimum of the lower ...

... conditions for the regularity of a boundary point (a boundary point Q is regular if condition (ii) above is satisfied ...

... Math. Physics 3, 71–75 (1924)] (as applied to the problem above) fulfils the different conditions given here. H. Gossé (Chicago, Ill.)

No. 9

AYZENSHTAT, N. D.   PA 237T81

USSR/Mathematics - Approximation Error   Nov/Dec 52

"Evaluating the Error in the Approximate Solution
of the Poisson Finite-Difference Equation," N. D.
Ayzenshtat, Moscow

"Matemat Sbor" Vol 31 (73), No 3, pp 485-490

Approximate solution of Dirichlet problem for
Poisson eq (cf.D. Yu. Panov, "Handbook on Numeri-
cal Solution of Differential Eqs with Partial
Derivs" Moscow-Leningrad, 1949) by means of finite
differences reduces to finding solution of certain
boundary-value problem for associated finite-dif-
ference eq. Present article finds difference be-
tween approx and exact solutions of the boundary
problem.   237T81

AYZENSHTAT, N. D.

USSR/Math - Nomogram Construction

Card 1/1

Authors   : Kreynes, N. M. and Aysenshtat, N. D.

Title   : On the possibility of nomogram construction with precision up to infenitesimals of the higher order.

Periodical: Dokl AN SSSR 95, 6, 1137 - 1140, 21 April 1954

Abstract : Theorems on nomogram construction of higher degrees of precision, analytical expression of the nomograms and their analyses are given in the article. The article also contains two exemplary diagrams.

Institution: M. V. Lomonosov State Univer. at Moscow

Submitted : 21 Feb 1954

AYZENSHTAT, N. D.

Kreines, M. A.; and Ayzenshtat, N. D. On nomographing
with accuracy up to infinitesimals of higher order.
Mat. Sb. N.S. 37(79) (1955), 337-352. (Russian)

$z = f(x, y)$ is said to be nomographable with accuracy up
to infinitesimals of kth order in the neighborhood of the
"ordinary" point x_0, y_0, z_0 if, briefly, $f(x, y) - N(x, y) =$
$O(\rho^k)$, where $\rho = [(x-x_0)^2 + (y-y_0)^2]^{\frac{1}{2}}$ and $z = N(x, y)$ is
equivalent, in the neighborhood of x_0, y_0, z_0, to the
vanishing of $\Delta(x, y, z)$, a Massau determinant. Attention
can be restricted to $x_0 = y_0 = z_0 = 0$ and it is shown that
transformations exist whereby $z = f(x, y)$ can be considered

to be in the form

$$Z = X + Y + \lambda Y(X-Y) \sum_0^{k-3} \mu_j X^j Y^j + O(\rho_{000}^k),$$

where $X = X(x)$, etc. Means for determining $X = X(x)$,
etc., are not given. The coefficients of the Taylor ex-
pansions of the functions in Δ are obtained explicitly, in
terms of the q_{ij} and arbitrary constants, for k up to 7,
and necessary and sufficient conditions for determining
them for $k = 8$ and 9 are given. It follows that if $f(x, y)$ can
be differentiated six times at x_0, y_0, and its first deriva-
tives do not vanish there, $z = f(x, y)$ is nomographable to
sixth order in the neighborhood of x_0, y_0. It is nomo-
graphable to the seventh order and even to the eighth

1/2

KRETOES, M. D.; AIZENSTAT, N. D.

"as a rule" since not to be so required satisfying certain
conditions among the g_{ij} (five in number for $k=7$).
Ninth-order nomographability is attained only for
functions which satisfy two conditions among the g_{ij}.
Consideration is given to the vanishing of f_x or f_y or both.
This did not appear in the authors' earlier brief report of
this investigation [Dokl. Akad. Nauk SSSR (N.S.) 95
(1954), 1137-1140; MR 16, 633].   R. Church.

2/2

AYZENSHTAT, N. D.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress (Cont.) Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izda:el'stvo AN SSSR, Moscow, 1956, 237 pp.
Shvarts, A. S. (Moscow). Volume Invariant of Coverings   137

Mention is made of Yefremovich, V. A.

There are 2 references, both of them USSR.

Section of Geometry   138-178

Reports by the following personalities are included:

Ayzenshtat, N. D. (Moscow). Vaynshteyn, I. A. (Moscow),
Kreynes, M. A. (Moscow). Nomography of Functions
Defined on Nets.   138

Bakel'man, I. Ya. (Leningrad) Evaluation Deformation
of a Convex Surface.   138

Bakhvalov, S. V. (Moscow) and Zidkov, N. P. (Moscow).
Approximate Solution of the Direct Geodesic Problem.   138-140

Card 45/80

AYZENSHTAT, N-D   AYZEN SHTAT, N. D.

SUBJECT	USSR/MATHEMATICS/Applied mathematics CARD 1/1 PG - 689
AUTHOR	KREINIS M.A., VAINSTEIN I.A., AISENSTAT N.D.
TITLE	On a tool for approximative nomogramming.
PERIODICAL	Doklady Akad.Nauk 110, 922-925 (1956)
	reviewed 4/1957

Let the function $z = f(x,y)$ be defined and continuous in the rectangle
$a_1 \leq x \leq a_2$, $b_1 \leq y \leq b_2$. Besides let it be rigorously monotone in both variables
(when the other variable is constant). The authors describe a tool which in
a series of cases in the same rectangle permits the construction of a nomo-
gram which corresponds to a function $z = N(x,y)$ being little different from
the function $z = f(x,y)$. Here not directly the nomogram of the function
$z = N(x,y)$ but its dual image is constructed.

KREYNES, M.A.; VAYNSHTEYN, I.A.; AYZENSHTAT, N.D.

Nomograms for functions given on a grid. Dokl. AN SSSR 111 no.5:
941-944 D '56.   (MLRA 10:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
Predstavleno akademikom A.N. Kolmogorovym.
          (Nomography (Mathematics)) (Functions of complex variables)

16(1)
AUTHORS: Kreynes, M.A., Vaynshteyn, I.A.,   SOV/39-48-3-5/5
             Ayzenshtat, N.D. (Moscow)

TITLE: Some Examples of Non-nomographic Functions

PERIODICAL: Matematicheskiy sbornik,1959,Vol 48,Nr 3,pp 377-395 (USSR)

ABSTRACT: The authors consider functions which are nomographed on a net
             and functions nomographed by means of continuous functions in
             a rectangle. Some examples of non-nomographic functions
             are given. The results of the paper are already contained in
             /Ref 1_7. Altogether there are 28 theorems and auxiliary
             theorems and 2 examples.
             There are 1 figure, and 2 references, 1 of which is Soviet,
             and 1 German.

SUBMITTED: October 23, 1957

Card 1/1

68970

S/020/60/131/02/008/071

16(1). 16,.500

AUTHORS: Kreynes,M.A., Vanyshteyn,I.A.,
            and Ayzenshtat,N.D.   16

TITLE: An Instance of a Lattice Which Cannot be Approximated by
            Rectifiable Lattices

PERIODICAL: Doklady Akademii nauk SSSR,1960,Vol 131,Nr 2,pp 249-252 (USSR)

ABSTRACT: Let G be a plane set homeomorphic to the closed square. Three
            families of curves A,B,C in G are denoted as a lattice
            S = A,B,C in G if they satisfy the following conditions:
            1) through every point of G there goes one curve of the
            families A,B,C each; 2) two curves of two families intersect
            at most in one point; 3) for every pair of these families there
            exists a topological mapping of G for which all curves of the
            pair go over into straight lines. S is called rectifiable if
            there exists a topological mapping of G for which all curves
            of A,B,C go over into straight lines. Let z = f(x,y) be defined
            in R: x ≤ x ≤ x̄, y ≤ y ≤ ȳ. The families of curves x = const,
            y = const, z = const form the lattice corresponding to the
            function z = f(x,y).

Card 1/2

68970

An Instance of a Lattice Which Cannot be   S/020/60/131/02/008/071
Approximated by Rectifiable Lattices

Let $p(t) = \begin{cases} -1/12(t-1)^7 + 7/12(t-1) + 1/2 & \text{for } 0 < t < 2 \\ 1 & \text{for } t > 2 \end{cases}$, and $p(t) = p(-2t)$ for $t < 0$.

Theorem 2: The lattice which corresponds to the function
$z = f(x,y) \cong x+y-1, 1 p(x)p(y)p(x+y)-$
$$-0,0001xy(x-2)(x-3)(y+1)(y-\tfrac{3}{2})$$

in the square R: $|x| \leq 3,5$, $|y| \leq 3,5$ cannot be approximated by rectifiable lattices.

There are 3 references, 2 of which are Soviet, and 1 German.

PRESENTED: November 17, 1959, by A.N.Kolmogorov, Academician

SUBMITTED: November 17, 1959

Card 2/2

AYZENSHTAT, N.D.; VAYNSHTEYN, I.A.; KREYNES, M.A.

Non-rectifiable lattices. Trudy Mosk.mat.ob.-va 9:537-561 '60.
(MIRA 13:9)

(Lattice theory)

AYZENSHTAT, S.Yu., inzh.; BARKAN, V.M., inzh.; KURTSMAN, M.D., inzh.;
    POZNYAKOV, N.V., inzh.; CHERNYAVSKIY, I.S., inzh.;
    SHTEINBERG, A.S., inzh.; MIL'SHTEIN, D.S., inzh., red.;
    KASHTANOV, F., red.; STEPANOVA, N., tekhn. red.

[Concealed electrical wiring in 1-464A-series large-panel
apartment houses] Montazh skrytoi smeniaemoi elektroprovodki v
krupnopanel'nykh zhilykh domakh serii 1-464A. Pod red. D.S
Mil'shteina. Minsk, Gos.izd-vo BSSR, Red. proizvodstvennoi lit-
ry, 1962. 75 p.   (MIRA 15:6)

1. Elektromontazh no.18, turst.
                        (Electric wiring, Interior)

BARKAN, V.M., inzh.; AYZENSHTAT, S.Yu., inzh.; GENKIN, S.I., inzh.

Concealed replaceable 1-464A-series industrial wiring for dwellings
with heavy paneling. Prom. energ. 17 no.3:39-42 Mr '62.
(MIRA 15:2)

(Electric wiring, Interior)

MALININ, S. (Minsk); POLONSKIY, M. (Minsk); AYZENSHTAT, V. (Minsk)

Using mathematical methods and electronic calculating machines
in planning. Vop. ekon no.9:66-73 S '61.   (MIRA 14:8)
(White Russia—Economics, Mathematical)
(Electronic calculating machines)

AYZENSHTAT, V.I.

Hydrothermally alternated rocks of the Sauk-Bulak ore deposit.
Uzb.geol.zhur. 6 no.2:22-27 '62.   (MIRA 15:4)

1. Glavnoye upravleniye geologii i okhrany nedr pri Sovete
Ministrov UzSSR.
        (Almalyk region--Rocks, Crystalline and metamorphic)

AYZENSHTAT, V.I.

Accelerated method for the quantitative and mineralogical recalculation of sections in the integration stage. Uzb. geol. zhur. 8 no.5:80-81 '64. (MIRA 18:5)

1. Glavnoye upravleniye geologii i okhrany nedr pri Sovete Ministrov UzSSR.

SOV/81-59-15-52492

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 15, p 29 (USSR)

AUTHORS: Fisher, I.Z., Ayzenshtat, V.S.

TITLE: On the Distribution of Atoms of an Admixture in a Crystal

PERIODICAL: Uch. zap. Belorussk. un-t, 1958, Nr 41, pp 181-188

ABSTRACT: The problem of the distribution of atoms of admixtures in crystals is
solved mathematically by a generalization of the analogous problem of
stellar statistics for the case of the discrete change of coordinates.
It has been shown that with the exception of solutions of unusually low
concentrations an appreciable part of couples of near-located admixture
atoms is found which strongly interact with each other. Due to the cha-
otic state of the distribution of admixture atoms, approximately half of
them has adjacent neighbors which are located 2 times nearer as in equal
distribution. The attraction of the atoms of the admixture contributes
to the increase of the non-homogeneity of the distribution of admixtures.

                                                            Yu. Leonov

Card 1/1

AYZENSHTAT, V.S.

Conditions under which a centralizer of matrix sets is a
scalar quantity. Dokl.AN BSSR 3   no.3:83-86   Mr '59.
(MIRA 12:8)

1. Predstavleno akademikom AN BSSR V.I.Krylovym.
(Matrices)

88631

16 4400

AUTHORS: Ayzenshtat, V. S., Metel'skiy, A. S.

TITLE: A Numerical Laplace Transformation

PERIODICAL: Inzhererno-fizicheskiy zhurnal, 1961, Vol. 4, No. 2,
            pp. 82-91

TEXT: A study has been made of the integral

$F(p) = \int_0^\infty e^{-px} f(x)dx$ (1)   which is widely used in integral transforma-

tions. By the substitution $px = t$, this integral acquires the form

$F(p) = p^{-1}\int_0^\infty e^{-t} f(t/p)dt$. Furthermore, this integral can be rendered in

the form $\int_0^\infty t^s e^{-t} \Psi(t)dt$ $(s > -1)$ (2) by the substitution

$f(t/p) = t^s \Psi(t)$. For the approximation of (2), the relation

Card 1/3

88631

A Numerical Laplace Transformation

S/170/61/004/002/009/018
B019/3060

$$\int_0^\infty t^s e^{-t} \Psi(t)dt \cong \sum_{k=1}^{n} A_k \Psi(t_k)$$ (3) is given, where $A_k = n! \Gamma(n+s+1)/t_k$

$$\left\{ L_n^{(s)'}(t_k) \right\}^2 \quad k = 1,2,3,\ldots,n \quad (4), \text{ and}$$

$L_n^{(s)}(t) = (-1)^n t^{-s} e^t \, d^n(t^{s+n} e^{-t})/dt^n$, are Laguerre polynomials of nth

degree. This mode of calculating (1) offers good results. The roots of
Laguerre polynomials of nth degree $y = L_n^{(s)}(t)$, which is known to

satisfy the differential equation $ty'' + (s+1-t)y' + ny = 0$, are determined
by way of a nonlinear system, from which it may be seen that the
coordinates of the equilibrium points of free electric charges coincide
with the roots of $L_n^{(s)}(x)$. A bulky Table gives, for s = -2/3, -1/2, -1/3.

1/3, 1/2, 2/3, 4/3, 3/2, 5/2, the values of t_k and A_k for n = 4... 10, and
k = 1... 10. V. I. Krylov is thanked for guidance and advice. There are
1 table and 5 references: 3 Soviet, 1 British, and 1 US.

Card 2/3

88631

A Numerical Laplace Transformation

S/170/61/004/002/009/018
B019/B060

ASSOCIATION: Institut matematiki i vychislitel'noy tekhniki AN BSSR, g. Minsk (Institute of Mathematics and Computer Technique of the AS BSSR, Minsk)

SUBMITTED: May 28, 1960

Card 3/3

AYZENSHTAT, V.S.; METEL'SKIY, A.S.

Computing integrals of the type $\int_{0}^{\infty} x^{s} e^{-x} f(x)\,dx$.

Vestsi AN
(MIRA 14:4)

BSSR Ser. fiz.-tekh. nav. no. 1:29-35 '61.
(Integrals)

AYZENSHTAT, V. S.

Finding the optimum operating conditions for some automata
with programmed control. Vestsi AN BSSR. Ser. fiz.-tekh. nav.
no.1:33-41 '63.   (MIRA 16:4)

(Automatic control)

AYZENSHTAT, V.S.

Multioperator cyclic processes. Dokl. AN BSSR 7 no.4:
224-227 Ap '63.   (MIRA 16:11)

1. Institut matematiki i vychislitel'noy tekhniki AN BSSR.
Predstavleno akademikom AN BSSR V.I. Krylovym.

AYZENSHTAT,Ya.; BELOTSERKOVSKAYA,B.(Kiyev)

Analysis of stereometric problems to be solved by calculation.
Mat. v shkole no.4:20-23 Jl-Ag '55.   (MLRA 8:9)
     (Geometry, Solid--Problems, exercises, etc.)

AYZENSHTAT, Ya.I. (Kiyev); BELOTSERKOVSKAYA, B.G. (Kiyev)

On calculating periods of trigonometric functions. Mat.v shkole
no.4:91-92 Jl-Ag '56.   (MIRA 9:9)
                (Trigonometrical functions)

AYZENSHTAT, Ya.I.

AYZENSHTAT, Ya.I.; BELOTSERKOVSKAYA, B.G. (Kiyev).

Easing the load for students studying trigonometry. Mat. v shkole
no.1:18-23 Ja.-F '58.   (MIRA 11:1)
                    (Trigonometry--Study and teaching)

AYZENSHTAT, Ya.I.; BELOTSERKOVSKAYA, B.G. (Kiyev)

Certain errors in textbooks. Mat v shkole no.3:86-88 My-Je '58.
(MIRA 11:5)

(Mathematics--Textbooks)

AYZENSHTAT, Ya.I. (Kiyev); KAURKOVSKIY, V.A. (Kiyev)

One of the ways to solve problems in stereometry. Mat.v shkole
no.4:56-57 Jl-Ag '62.   (MIRA 15:11)
        (Mensuration—Problems, exercises, etc.)

AYZENSHTAT, Yakov Iosifovich; BELOTSERKOVSKAYA, Basya Grigor'yevna; PAZEL'-
SKIY, S.V., red.; SMIRNOVA, M.I., tekhn. red.

[Solving of problems in trigonometry; manual for teachers] Reshenie
zadach po trigonometrii; posobie dlia uchitelei. Moskva, Gos.
uchebno-pedagog. izd-vo M-va prosv. RSFSR, 1960. 254 p.
(MIRA 14:6)

(Trigonometry—Problems, exercises, etc.)

Ayzenshtat, Ya.S.

.USSR/General Biology - Genetics   B-5

Abs Jour : Ref Zhur - Biol., No 2, 1958, No 4879

Author   : Aizenshtat, Ya.S.

Inst   : Not Given

Title   : The Effect of Fertilization Conditions on Hereditary Trans-
           mission

Orig Pub : V kn. Voprosy biologii oplodotvoreniya. L., Izd.-vo Leningr.
           un-ta, 1954, 73-140

Abstract : A study was conducted on the effect of preliminary grafting of
           crossed plants, the quantity of pollen applied, the age of sex
           cells and condition of the maternal plant, on dominance and
           splitting. The tests were conducted on 20 varieties of toma-
           toes and 13 varieties of peas. Based chiefly on splitting
           into F_2 by markedly contrasting symptoms, the author made
           the following deductions: a preliminary grafting of a pa-
           ternal plant on a maternal one markedly increases predom-
           inance of paternal features in F_1 or F_2 progeny; when

Card   : 1/2

USSR/General Biology - Genetics

Abs Jour : Ref Zhur - Biol., No 2, 1958, No 4879

           fertilized by a small quantity of pollen, maternal features
           are increased in F_1 and F_2, while splitting may be altogether
           absent. Weakening of pollen cell vitality as, for instance,
           in cases of pollination by aged pollen, leads to a predominance
           of maternal features in hybrids F_1 and F_2. An increase of
           maternal features in F_1 and F_2 occurs also in cases of pollin-
           ating flowers formed in the period of greatest vitality of the
           maternal plant. The indicated methods for regulating trans-
           mission of inherited properties are recommended for wide
           utilization in practical selective-genetive technique. For
           critical analysis of this study see Bulletin of Moscow Society
           of Natural Studies, Department of Biology, 1956, 61, No 5,
           83-91.

Card   : 2/2

Ya. S., kandidat biologicheskikh nauk; SHIPILOVA, I.I.

Characteristics of pollen germination at different stages of
development of the tomato and pea flower. Dokl. Akad. sel'khoz.
?? no.3:29-32 '57.   (MLRA 10:6)

1. Leningradskiy gosudarstvenny universitet imeni A.A. Zhdanova.
Predstavlena akademikom D.D. Breshnevym.
            (Pollen)   (Peas)   (Tomatoes)

AYZENSHTAT, Ya.S.

Some problems of segregation in plant hybrids [with summary in English]
Biul,MOIP. Otd.biol. 63 no.4:101-117 Jl-Ag '58   (MIRA 11:11)
(HYBRIDIZATION, VEGETABLE)

AYZENSHTAT, Ya.S.; ZHUKOVA, Z.A.

Some problems of segregation in hybrid plants. Vest.LGU 14
no.21:28-41 '59.   (MIRA 12:10)
            (Hybridization, Vegetable)

AYZENSHTAT, Ya.S.

Role of supplementary pollination with alien pollen in hybridi-
zation. Zhur.ob.biol. 20 no.2:115-127 Mr-Ap '59.

(MIRA 12:5)

(HYBRIDIZATION, VEGETABLE)

AYZENSHTAT, Ya.S., kand.biol.nauk

Effect of the pollen of remote species on segregation in intervarietal breeding of tomatoes. Trudy po prikl. bot., gen. i sel. 32 no.3: 299-303 '59.   (MIRA 14:5)
                                          (Tomato breeding)

AYZENSHTAT, Ya.S.

Effect of the age of parental plants on segregation in pea hybrids.
Issl. po gen. no.1:122-136 '61.   (MIRA 15:1)
            (HYBRIDIZATICN, VEGETABLE)

AYZENSHTAT, Ya.S.

Influence of age-related changes of the sexual elements on
cleavage in hybrids of peas. Zhur. ob. biol. 22 no.4:292-304
Jl-Ag '61.

(HYBRIDIZATION, VEGETABLE)
(PEAS)

(MIRA 15:6)

AYZENSHTAT, Ye.S.

Effect of the conditions of the year of crossing on the segregation
of hybrid offspring. Izdl. po gen. no.2:150-154 '64.   (MIRA 18:4)
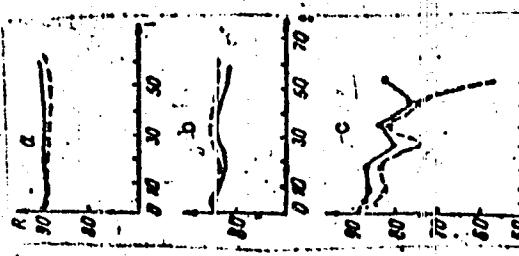
L 24857-66
ACC NR: AP6009441

Fig. 1. Reflection factor before and after (dotted and continuous curves) conversion versus amount of faience flour (a), graphite (b), and sawdust (c) added to resin.

exceeded by a factor of 5--6 the adhesion of a mirror surface produced by vaporization in a vacuum. Causes of fogging of the reflecting surface with time are explained, and methods of their elimination are shown. Orig. art. has: 5 photographs, 1 graph, and 1 table.

SUB CODE: 10, 20/   SUBM DATE: 23Apr65/   OTH REF: 002

2/2 dda

STARODUBTSEV, S.V.; TIKHOMOLOVA, M.P.; AYZENSHTAT, Ye.L.; TASHMUKHAMEDOVA, K.

Effect of ionized radiation on carbohydrates. Part|: Formation of
formaldehyde and 1,3-dihydroxyacetone in the course of gamma-raying
of aqueous solutions of glucose, fructose, and maltose. Zhur.ob.khim.
31 no.9:3115-3118 S '61.   (MIRA 14:9)
                        (Saccharides) (Gamma rays)

Some Characteristics of Deemulsifiers, Dissolved in Petroleum

Since 1956 the refinery has been processing "Archeda"
petroleum which contains very small quantities of
naphthenic acids. The petroleum is dehydrated and de-
salted by washing with hot water in the presence of
the sulpho-naphtha deemulsifier. Acidic goudrons ob-
tained during the purification of Archeda distillates
also contain surface active substances which are similar
to sulpho-acids. The yield of alkaline waste products
is considerably lower than during the purification of
petroleums which contain a large amount of naphthenic
acids, but the quantity of organic substances reaches
50 to 100,000 mg/litre. The authors investigated the
possibility of preparing deemulsifiers of the aluminium
sulpho-naphthenate type from these waste materials;
according to Ye. A. Myshkin this compound is more active
than aluminium naphthenate. The Archeda reagent is
a very satisfactory deemulsifier and according to the
statements by Chemical Engineer Ye. V. Timofeyuk and
by the Laboratory Assistant R. Ye. Grigor'yeva it has
been used for dehydration of petroleum since April, 1957.
However, it causes strong corrosion of the distillation
Card 2/4   plates, of the walls of the columns, pumps etc., but

SOV/65-58-10-7/15

Some Characteristics of Deemulsifiers, Dissolved in Petroleum

are treated with aluminium salts to decrease the content of organic compounds in the effluents. There is 1 Soviet Reference

ASSOCIATION: Gor'kovskiy neftemaslozavod im. 26 Bakinskikh komissarov (Gor'kiy Petroleum Refinery imeni 26 Baku Commissars)

Card 4/4

Anastas'yevsk Crude Oil From Bed IV as a   77541
Raw Material for Low-Viscosity Oils   SOV/65-60-2-1/15

13.4% heavy aromatic compounds and tars, less than
0.2% paraffin, and less than 0.1% S; the tar content
reaches 35 to 40% after extraction of bright stock
up to 300° C. All types of special oils can be pro-
duced from this crude oil, which contains up to 80%
fuel and lube low-solid point distillates. Using the
same methods as applied to Baku oils, the two refineries
produced 14 different products whose solid points
ranged from -12 to -70° C. Additional purification
was necessary only in a few cases. The purified
products were better than those from the Baku and
Emba crude oils. For instance, transformer oils
could be obtained from the Anastas'yevsk oils that
did not require antioxidant and antidepressing
additives. However, the transformer oil was of
lower quality than imported oils. To achieve the
latter's quality, the Yaroslavl refinery purified
the distillate with SO_3 gas and added 0.2% ionol or

Card 2/3   0.1% VTI-1, another antioxidant, to the product.

AYZENSHTAYN, P.G.; STARUKHINA, K.A.

Production of MB-70 and MB-90 cable-joint fillers from
Romashkino petroleum. Nefteper. i neftekhim. no.2:14-16
'63.   (MIRA 17:1)

1. Gor'kovskiy neftemaslozavod.

L 52614-65   EWT(1)/EWT(m)/EPF(c)/T/EWP(k)   Pf-4/Pr-4/Pi-4   IJ

ACCESSION NR: AP5009997   UR/0318/65/000/003/0020/0024

AUTHORS: Ayzenshtayn, P. G.; Bulatova, I. N.; Sobolev, A. I.

TITLE: Production of sulfofresol with ultrasonics

SOURCE: Neftepererabotka i neftekhimiya, no. 3, 1965, 20-24

TOPIC TAGS: ultrasonics, lubricant, coolant, organic synthesis

ABSTRACT: Sulfofresol is one of the most important lubricant-coolant fluids used
in the treatment of metals. The chief supplier is the Gor'kovskiy neftemaslozavod
im. 26 Bakinskikh komissarov (Gorkiy Petroleum-oil Plant). The technology for
producing it was set up in 1935 and has remained essentially unchanged. Sulfo-
fresol is obtained by mixing medium-viscosity mineral oils with a so-called
sulfured base at 110-120C. It is produced in nigrol heated to 120C with addition
of elemental sulfur during careful stirring. The temperature in the vat is then
raised to 165C, and this temperature is held for 10-12 hours. The process is
long and tedious, so to simplify the production of sulfofresol the authors inves-
tigated the possibility of using ultrasonics. An ultrasonic head was submerged
in a column of the liquid mix and hydrodynamic currents were generated by means
of a disk. The general procedure was to dissolve elemental sulfur (10-12%)

Card 1/2

L 52414-65

ACCESSION NR: AP5009997

in nigrol at 1300, with careful stirring. After complete solution, the nigrol and dissolved sulfur were mixed with distillate, heated to 1300 again, and subjected to ultrasonic radiation. High-quality sulfofresol was obtained in this way. Samples were obtained at different periods of ultrasonic radiation, and the properties of the resulting material were determined. All tests indicate that the sulfofresol obtained by the new technique has cutting-coolant properties equivalent to that obtained by the old, and the stability is equally good. Orig. art. has: 3 figures and 4 tables.

ASSOCIATION: Gor'kovskiy naftemaslozavod im. 26 Bakinskikh komissarov (Gorkiy Petroleum-Oil Plant)

SUBMITTED: 00   INCL: 00   SUB CODE: FP, MM, ??

NO REF SOV: 000   OTHER: 000

Card 2/2

L 10732-63   EPR/EWP(j)/EPF(c)/EWT(m)/EDS   AFFTC/ASD   Ps-4/Pc-4/
Pr-4   IJM/WW

ACCESSION NR: AP3000222   S/0166/63/000/002/0061/0064   73

AUTHOR: Kleyn, G. A.; Tikhomolova, M. P.; Ayzenshtat, Ye. L.; Sultanova, M.   72

TITLE: Change in properties of triacetate fiber under effect of gamma rays

SOURCE: AN UzSSR. Izv. Seriya fiziko-matem. nauk, no. 2, 1963, 61-64

TOPIC TAGS: gamma irradiation, triacetate fibers

ABSTRACT: The change in properties of triacetate fiber No. 100 subjected to gamma irradiation and the influence of experimental conditions on the rate of radiolytic decomposition have been investigated. In particular, the radiative destruction of clean and greasy fibers with different moisture contents was studied in a nitrogen atmosphere and air. It was found that irradiation reduces the viscosity, strength, and relative elongation of specimens. Radiative stability is higher in fibers irradiated in air than in nitrogen. The characteristic viscosity of specimens exposed to $2 \cdot 10^6$ r in nitrogen and air dropped to 1.7 and 1.9, respectively; that of specimens exposed to $5 \cdot 10^6$ r, to 1.0 and 1.3. It is shown that air-dried specimens are more resistant to irradiation than moistened specimens. The degree of polymerization of air-dried fibers dropped to 430 and 330 with doses

Card 1/2

L 10732-63
ACESSION NR: AP3000222

of $2 \cdot 10^6$ and $5 \cdot 10^6$, respectively; that of fibers moistened to 40 and 100%, to 330 and 220. It was proved that greasing reduces the influence of a gaseous medium on the radiative destruction of fibers. The characteristic viscosity of greased fibers in a nitrogen oxide atmosphere and in air dropped to 1.75 and 1.0, respectively; under the same conditions, the viscosity of clean fibers was 2.0 and 1.3. Orig. art. has: 2 figures, 1 formula, and 2 tables.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN UzSSR (Physicotechnical Institute AN Uzbek SSR

SUBMITTED: 10Dec62   DATE ACQ: 12Jun6?   ENCL: 00

SUB CODE: NS,MA   NO REF SOV: 005   OTHER: 004

Card 2/2

AYZENSHTEYN, A.G.; IVANOV, V.A.; LISOVSKIY, D.I.

Measuring the deposition rate of pure metals from the vapor phase.
TSvet. met. 38 no.9:65-66 S '65.

(MIRA 18:12)

AYZENSHTEYN, A.I

405. AN ELECTRONIC METHOD OF MEASURING THE STRENGTH OF AN ELECTROSTATIC FIELD. A. Ayzenshtein. C. R. Acad. Bulg. Sci., Vol. 4, No. 2-3, 25-8 (April-June, Oct.-Dec., 1951) In Russian.

537.212 : 537.543

An externally applied electrostatic field can be used instead of a grid electrode to control the anode current of a valve. When the external field is applied the anode current changes, but owing to the finite conductivity of the glass envelope returns to its former value in from 1 sec to 12 min. Quartz glass is found to be the most satisfactory material for the envelope, and a Phillips electrometer valve 4060 was employed. Used with a d.c. amplifier the earth's electrostatic field can be measured.

A. L. Mackay

AYZENSHTEYN, A.I., insh. (g. Sofiya). NETUSHIL, A.V., doktor tekhn. nauk, prof.

Using a Q-meter circuit to measure low values of Q. Elektrichestvo
no.12:69-71 D '56.   (MIRA 11:3)

(Electric measurements)

ATZENSHTEYN, A.I. (Bulgaria).

New design of high-ohmic resistors. Izm. tekh. no.3:58 My-Je '57.
                    (Electric resistors)   (MLRA 10:8)

SOV-120-58-1-28/43

AUTHOR: Ayzenshteyn, A. I.

TITLE: Measurement of High Voltage (Izmereniye vysokogo napryazheniya)

PERIODICAL: Pribory i Tekhnika Eksperimenta, 1958, Nr 1, pp 120-122 (USSR)

ABSTRACT: The object of the present work was to replace the usual electrostatic and valve voltmeters incorporating capacitative dividers by more accurate, universal, and relatively cheap instruments. The capacitative dividers are replaced by more effective electronic dividers. The electronic method suggested here opens new possibilities in the measurement of high voltages and the intensity of electrostatic fields. The principle of action of the instrument is illustrated in Figs.1 and 2, and is based on the external electrostatic control of an electronic valve (Ref.1). The control grid of an electronic valve is replaced by an external electrode whose electrostatic field penetrates through the envelope of the valve. Any diode in which the space between the anode and the cathode is not screened may be used. The RFG-5 kenotron was used in the present work. It has a large interelectrode distance and its getter is near the cathode (Fig.2). The theory

Card 1/2

SOV-120-58-1-28/43

Measurement of High Voltage.

of the effect of the external control electrode on the anode current is developed. The instrument can be used to measure a high DC voltage by means of a circuit shown in Fig.4. This may be done as follows: the control electrode is connected to the point which is at a high potential and a screen containing some holes is interposed between the electrode and the valve. When the material of the screen is suitably chosen the DC field is converted into variable field and can be measured through its effect on the anode current flowing through the kenotron. If high alternating voltages are to be measured the rotating screen is removed and the circuit shown in Fig.3 is employed. In the latter case the kenotron works in conjunction with a peak voltmeter. Various possible applications are suggested. There are 4 figures and 4 Soviet references.

ASSOCIATION: Bolgarskaya Akademiya nauk (Bulgarian Academy of Sciences)
SUBMITTED: July 6, 1957.

1. Voltage--Measurement   2. Voltmeters--Performance   3. Voltmeters --Circuits   4. Voltage dividers--Circuits
Card 2/2

SOV/120-59-2-28/50

Some Peculiarities of Negative Feedback and their Application to
an Electronic Voltage Divider

explained by the fact that in most valves the emitting
surface of the cathode is slightly greater in length
than the projected area covered by the grid; this means
that a proportion of the anode current is normally
uncontrolled, but that when the heater voltage is reduced
the active area of the cathode lies entirely under the
shadow of the grid. In the circuit of Fig 2 the
separate biasing of the grid ensures that the circuit
should work with pure negative alternating current feed-
back; experiments show, however, that the stabilising
coefficient exceeds the theoretical amount $1+SR_k$ because
the resistance R_k appears simultaneously as the anode
load and acts also as a source of voltage feedback. In
the subject of Fig 3 positive bias is applied to the grid
and the feedback is both direct and alternating and
depends on current. The effects of change in heater
voltage are shown in Table 2. Both this table and the
results in Table 1 (which apply to Fig 1) show the
Card 2/4   effects of over-compensation. Direct current feedback
also stabilises the slope of the valve against

SOV/120-59-2-28/50

Some Peculiarities of Negative Feedback and their Application to an Electronic Voltage Divider

By this means the error in an electronic voltage divider may be reduced to 0.1%.

Card 4/4   There are 6 figures, 4 tables and 3 Soviet references.

ASSOCIATION: Central Laboratory of the V. Kolarov Factory, Sofia

SUBMITTED: June 30, 1958

83156

A Maximum Indicator   S/115/60/000/008/006/013
                                             B019/B063

is obtained in dependence on the rectified alternating current. A dis-
advantage of this method is the fact that compensation is done by hand.
This may be avoided by connecting the above-mentioned maximum indicator
into a differentiator. This type of maximum indicator is described in
detail and illustrated by the circuit diagram shown in Fig. 1. There are
1 figure and 1 Soviet reference.

Card 2/2

TITOV, B.M., dots.; AYZENSHTEYN, A.R.

Fans in series for booster ventilation. Izv.vys.ucheb.zav.; gor.zhur.
no.4:114-119 '58.   (MIRA 11:11)

1. Tomskiy politekhnicheskiy institut.
        (Mine ventilation)   (Fans, Mechanical)

BOGOMOLOV, N.A., inzh.; SEMENENKO, V.D., kand.tekhn.nauk; AYZENSHTEYN, A.M., inzh.

Industrial testing of SVM-6 fans for local ventilation. Ugol' Ukr. 3 no.12:34-36 D '59.   (MIRA 13:4)
                    (Mine ventilation)

AYZENSHTEYN, B.I.; ZAKHAROV, V.I., red.

[Manual on the state and development of public-eating
establishments in the R.S.F.S.R.]Spravochnik o sostoianii i
razvitii obshchestvennogo pitaniia v RSFSR. [By] B.I.
Aizenshtein i dr. Moskva, Gostorgizdat, 1960. 99 p.

(MIRA 15:10)

(Restaurants, lunchrooms, etc.)

GANAGO, F.M., kand. med. nauk; Prinimal. uchastiye: ALEKSEYEVA, R.M., vrach (Sverdlovsk); AYZENSHTEYN, B.S., vrach (Sverdlovsk); BABINOVA, G.D., vraoh (Sverdlovsk); BOROWITSKAYA, L.M., vrach (Sverdlovsk); VARGANOVA, M.V., vrach (Sverdlovsk); KOPYLOVA, K.P., vrach (Sverdlovsk); SOKOLOVA, O.V., vrach (Sverdlovsk); SHEVTSOVA, R.P., vrach (Sverdlovsk); SHELAMOVA, I.M., vrach (Sverdlovsk); BYKHOVSKAYA, M.A., vrach (Revda); BELYAYEVA, N.Yu., vrach (Magnitogorsk); KRUGLOVA, N.A., vrach (Kurgan); NIKIFOROVA, F.N., vrach (Kurgan); MITINA, O.A., vrach (Asbest); PORICHOVNIKOVA, E.D.,vrach (Ufa); PONOMAREVA, N.I., vrach (Orenburg); RASSOSHNYKH, G.F., vrach (Perm'); SAZANOVA, V.V., vrach (Izhevsk)

Chemoprophylaxis of tuberculosis in children and adolescents in foci of tuberculous infecticn. Probl. tub. 42 no.1:6-11 '64.
(MIRA 17:8)

1. Detskoye otdeleniye (zav. F.M. Ganago) Sverdlovskogo instituta tuberkuleza (dir. - prof. I.A. Shaklein) (for Ganago).

AYZENSHTEYN, E.M.; ZHIVINA, M.I.

Evaluating the molecular weights of polyethylene terephthalate and
of the fibers made from it (lavsan). Khim. volok. no.2:74-75 '64.
(MIRA 17:5)

1. "--"oyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna.

L 15708-6
RM   EWA(v)/EWT(m)/EWP(j)/T   Pc-4/Pe-5   ASD-3/ESD(t)/SSD/AFWL/ASD(m)-3
ACCESSION NR: AP4046263   S/0183/64/000/005/0023/0026

AUTHOR: Mikhaylov, N. V.; Gorbacheva, V. O.; Ayzenshteyn, E. M.;
Khokhlova, N. S.; Petukhov, B. V.

TITLE: The influence of molecular weight upon the structure and properties of
lavsan

SOURCE: Khimicheskiye volokna, no. 5, 1964; 22-26

TOPIC TAGS: synthetic fiber, polyester fiber, polyethylene terephthalate fiber,
molecular weight, fiber structure, fiber property, lavsan, polymer crystalliza-
tion, polymer amorphization, polymer orientation

ABSTRACT: The relation between structure and molecular weight was investi -
gated for lavsan, a polyester fiber, and a fiber from polyethylene terephthalate
(PETP) for the purpose of improving the properties of polyester fibers; PETP
resembles lavsan at certain stages. Crystallization kinetics, orientation and
morphology were determined. Polymers with r 16-30,000 molecular weight and

Card 1/2

L 15708-65
ACCESSION NR: AP4046263

fibers of 17-25,000 molecular weight were investigated; the methods for determining molecular weight and properties are enumerated. Dilatometric curves between 40-140C and density measurements showed that an increase in molecular weight decreased polymer tendency to crystallization. The higher the molecular weight, the broader the interval of the glassforming range (51-96C). Amorphization of PETP increased with increasing molecular weight. So did the coefficient $(\alpha = \frac{\Delta n}{\Delta n_0})$ (double refraction index) for determining the orientation of the isotropic fiber. The same applied to lavsan. Fiber strength paralleled molecular weight; this was obtained at higher temperatures. Data on swelling and dissolution in 80 percent sulfuric acid showed fibers with higher molecular weight more resistant to the attack of the acid. Such conditions of structural formation provide good possibilities for obtaining lavsan fibers of great strength. Orig. art. has: 7 figures and 1 table
ASSOCIATION: VNIIV

SUBMITTED: 03Aug63   ENCL: 00
SUB CODE: MT, GO   NO REF SOV: 010   OTHER: 004

Card 2/2

L 24616-65   EWT(m)/EWP(j)/T   Pc-4   RM

ACCESSION NR: AP4049878   S/0183/64/000/006/0018/0022

AUTHOR: Ayzenshteyn, E. M.; Petukhov, B. V.

TITLE: Effect of molecular weight on orientative drawing and properties of Dacron fiber

SOURCE: Khimicheskiye volokna, no. 6, 1964, 18-22

TOPIC TAGS: Dacron, polyethylene terephthalate, fiber, film, crystallization, mechanical property, plastic deformation, strength, fatigue property, creep

ABSTRACT: The effect of changing the molecular weight of the polyethylene tere-phthalate from 17500 to 25000 on the drawing of the Dacron fiber (drawn from #6. 2-11. 5 to #34-36) and the fiber properties were investigated. The tendency of the isotropic (unstretched)fiber to age and to crystallize on heating decreased with increasing molecular weight. With increasing molecular weight the tension upon drawing increased, the maximum extent to which the fiber could be effective-ly drawn decreased, and the fiber adhered less to the metal surface of the heating element. A study of the drawing temperature-mechanical property relationship

Cord 1/2

L 24698-65
ACCESSION NR: AP4049878

2

showed the optimum drawing temperature was determined by the drawing rate and factor and the material molecular weight. Drawing at temperatures above the optimum decreased the dynamic resistance of the fiber. The modulus of elasticity of isotropic fiber was almost independent of molecular weight, but increased in anisotropic fiber as the molecular weight increased. Increase in molecular weight reduced the tendency toward irreversible plastic deformation, improved the fatigue properties, fiber strength, pliability and dynamic resistance of the polyester fiber, permitted a higher optimum drawing temperature, and decreased the creep on heating. Orig. art. has: 8 figures and 3 tables

ASSOCIATION: VNIIV; VNIIS

SUBMITTED: 22Nov63   ENCL: 00

SUB CODE: MT   NO REF SOV: 019   OTHER: 000

Card 2/2

L 52143-65   EWT(m)/EWP(j)/T   Pc-4   RM
ACCESSION NR: AP5017076   UR/0183/64/000/004/0024/0028

AUTHOR: Ayzenshteyn, E. M.; Petukhov, B. V.

TITLE: Problems in forming the polyester fiber lavsan

SOURCE: Khimicheskiye volokna, no. 4, 1964, 24-28

TOPIC TAGS: polyester plastic

ABSTRACT: A tendency toward increased breaking length of the fiber lavsan
with increased rate of formation has been established. The amount of
orientational stretching in the polyester fiber depends considerably more
on the spinneret stretch than on the polyamide fiber. To obtain lavsan
fiber of relatively high molecular weight (23,000-25,000), it is desirable
to use a worm spinning head and a forming temperature not above 290°C.
Variation in fiber molecular weight from 17,500 to 25,000 increased breaking
length of lavsan fiber from 30-35 km to 55-58 km. A similar trend has also
been observed for fiber made of the copolyester of terephthalic and hexa-
hydroterophthalic acid.
Orig. art. has: 2 formulas, 4 graphs, 2 tables.

Card 1/2

L 52143-65
ACCESSION NR: AF5017076

ASSOCIATION: VNIIV

SUBMITTED: 15Jul63   ENCL: 00   SUB CODE: MT

NR REF SOV: 010   OTHER: 023   JPRS

Card 2/2

AYZENSHTEYN, E.M.; PETUKHOV, B.V.

Viscosity of the melts of polyethylene terephthalate. Khim.
volok. no.4:20-23 '64.

Some problems of the formation of the polyester fiber lavsan.
Ibid.:24-28   (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo
volokna.

L 22607-66   EWT(m)/EWP(j)/T   RM

ACC NR: AP6005834   SOURCE CODE: UR/0374/65/000/006/0146/0151

AUTHOR: Geller, V. E. (Kalinin); Vysotskaya, Z. P. (Kalinin); 52
Ayzenshteyn, E. M. (Kalinin); Petukhov, B. V. (Kalinin)

ORG: none

TITLE: Investigation of orientational drawing of lavsan monofilament

TOPIC TAGS: polyester plastic, polyethylene plastic, physical
chemistry property, heat effect, temperature dependence, drawing,
synthetic fiber

ABSTRACT: The paper represents an investigation and comparison of
two versions of orientational drawing of lavsan monofilament, one
being the conventional method of hot water drawing based on the
difference in speeds of rotating discs and the other, the method of
drawing the fiber through the hole of a draw plate. The nature of
tensile and structural properties has been studied in the

Card 1/2   UDC: 678.677.4

L 22607-66
ACC NR: AP6005834

temperature range of 70 to 100C.   Orig. art. has: 9 figures.   [Based
on author's abstract]

SUB CODE: 07, 11/   SUBM DATE: 12Apr65/   ORIG REF: 006/
OTH REF: 014/

Card 2/2 BW

RYAZANOVA, V.S.; AYZENSHTEYN, F.A.; ROKIN, L.Ya. (Moskva)

Urgent problems in patholanatomical service in a psychiatric
hospital. Zhur. nerv. i psikh. 60 no. 12:1661-1664 '60.

(PSYCHIATRY)   (MIRA 14:4)

AYZENSHTEYN, F.A. (Moskva)

Pathomorphology of the central nervous system in thyrotoxicosis.
Arkh. pat. 26 no.9:55-63 '64.   (MIRA 18:4)

1. Institut morfologii cheloveka (dir. - chlen-korrespondent
AMN SSSR prof. A.P.Avtsyn) AMN SSSR, otdel patomorfologii
tsentral'noy nervnoy sistemy (zev. - kand.med.nauk A.P.Sokolova)
TSentral'nogo nauchno-issledovatel'skogo instituta psikhiatrii
(dir. - prof. D.D.Fedotov) Ministerstva zdravookhraneniya RSFSR
i patologoanatomicheskoye otdeleniye psikhonevrologicheskoy
gorodskoy bol'nitsy No.3 (glavnyy vrach N.N.Krylova), Moskva.

AYZENSHTEYN, F.A.

Pathomorphological characteristics of thyrotoxic encephalopathia.
Zhur. nevr. i psikh. 65 no.6:928-933 '65.

(MIRA 18:6)

1. Institut morfologii cheloveka (direktor - prof. A.P. Avtsyn)
AMN SSSR i Gorodskaya psikhonevrologicheskaya bol'nitsa No.3
(glavnyy vrach N.N. Krylova), Moskva.

AYZENSHTEYN, F.A.

Pathoanatomical changes in myoclonus epilepsy. Zhur. nerv. i psikh.
61 no. 1:67-72 '61.   (MIRA 14:4)

1. Kostromskaya oblastnaya psikhonevrologicheskaya bol'nitsa (glavnyy
vrach M.V. Donskaya).

                        (EPILEPSY)

AL'TMAN, Ya.A.; AYZENSHTEYN, F.A.

Some data on the problem of psychoses in Basedow's disease.   Zhur.
nevr. i psikh. 60 no.3:334-342 '60.   (MIRA 14:5)

1. Kontromskaya oblastnaya psikhonevrologicheskaya bol'nitsa.
         (PSYCHOSES)   (GRAVES' DISEASE)

AYZENSHTEYN, F.A.

Histopathology of the spinal cord in thyrotoxicosis and
experimental hyperthyroidism. Probl. endok. i gorm. 11
no.1:109-113 Ja-F '65.   (MIRA 18:5)

1. Institut morfologii cheloveka (dir. - prof. A.P. Avtsyn)
AMN SSSR, otdel patomorfologii tsentral'noy nervnoy sistemy
TSentral'nogo nauchno-issledovatel'skogo instituta psikhiatrii
(dir. - prof. D.D. Fedotov) Ministerstva zdravookhraneniya
RSFSR i Psikhonevrologicheskaya gcrodskaya bol'nitsa No.3
(glavnyy vrach N.N. Krylova), Moskva.

AYZENSHTEYN, I.

Radio - Apparatus and Supplies

Apparatus for testing radio tubes. Sov. torg. No. 3, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.