KVALIASHVILI, G.A.

Presence of forms of fauna of the Kul'ianits horizon in the Guria beds in Guria. Dokl.AN SSSR 96 no.1:161-162 My '54.   (MLRA 7:5)

1. Sektor paleobiologii Akademii nauk Gruz.SSR. Predstavleno akademikom S.I.Mironovym.   (Guria--Paleontology) (Paleontology--Guria)

Kvaliashvili, G.A.

KVALIASHVILI, G.A.

New representatives of the genus Neoprosodacna from Kotsakhuri
deposits of eastern Georgia. Soob. AN Gruz. SSR 18 no.5:563-569
My '57.
(MLRA 10:9)

1. Akademiya nauk Gruzinskoy SSR, Sektor paleobiologii, Tbilisi.
Predstavleno akademikom L.Sh. Davitashvili.
(Georgia--Lamellibranchiata, Fossil)

KVALIASHVILI, G.A., Cand Geol-Min Sci — (diss) "Kotsakhuri (onoonine

bearing) prospects of Georgia." Baku, 1959. 18 pp (Min of Higher

Education USSR. Azerbaydshan State U im S.M. Kirov). 100 copies

(KL,38-59, 115)

22

KVALIASHVILI, G.A.

Geographical distribution of the Oncophora and Gori horizons.
Trudy Inst. paleobiol. AN Gruz. SSR 5:161-212 '60.   (MIRA 13:12)
(Geology, Stratigraphic)

KVALIASHVILI, Georgii Aleksandrovich, starshiy nauchnyy sotr.,
kand. geologo-miner. nauk; DAVITASHVILI, L.Sh., red.;
AVALIANI, N.M., red. izd-va; BOKERIYA, E.B., tekhn.red.

[Oncophora (Rzehakia) horizon of Eurasia]Onkoforovyi
(rzegakievyi) gorizont Evrazii. Tbilisi, Izd-vo Akad. nauk
Gruzinskoi SSR, 1962.   231 p.   (MIRA 15:12)

1. Institut paleobiologii Akademii nauk Gruzinskoy SSR (for
Kvaliashvili).
                    (Mollusks, Fossil)

ZHIZHCHENKO, B.P.; KVALIASHVILI, G.A.

Miocene deposits of eastern Georgia. Soob. AN Gruz. SSR 27
no.1:39-42 Jl '61.   (MIRA 16:8)

1. AN GruzSSR, Institut paleobiologii, Tbilisi. Predstavleno
akademikom AN GruzSSR L.Sh.Davitashvili.
                    (Georgia--Geology, Stratigraphic)

KVALIASHVILI, G.A.

Stratigraphic position of the Tarkhan horizon. Trudy Inst.
paleobiol. AN Gruz. SSR 7:145-156 '62.   (MIRA 17:7)

KVALIASHVILI, G.A.

Formation of deposits of the Cimmerian stage in western
Georgia. Trudy Inst. paleobiol. AN Gruz. SSR 8:35-41 '63.
(MIRA 17:7)

KVALIASHVILI, M.A.

New method for the early diagnosis of glaucoma. Soob.AN Gruz.
SSR 21 no.2:237-240 Ag '58.   (MIRA 12:6)

1. Glaznaya klinika Tbilisskogo gosudarstvennogo medinstituta.
Predstavleno akademikom A.D.Zurabashvili.
(GLAUCOMA--DIAGNOSIS)

KVALIASHVILI, M. A. Cand Med Sci -- (diss) "Application of small doses of X-rays

for the purpose of ~~arriving-at an~~ early diagnosis of glaucoma." Tbilisi, ▓▓▓

Publishing House of the Acad Sci Georgian SSR, 1959. 10 pp (Tbilisi State Med

Inst), 200 copies (KL, 41-59, 106)

KVALIASHVILI, M.A.

Use of small doses of X rays in the early diagnosis of glaucoma.
Vest.oft. 72 no.6:13-16 N-D '59.
(MIRA 13:5)

1. Glaznaya klinika Tbilisskogo meditsinskogo instituta (zav.
kafedroy glaznykh bolezney - prof. Sakharulidze) i Respublikanskaya
klinicheskaya bol'nitsa imeni Tarsaidze (glavnyy vrach P.D.
Macharashvili).
         (GLAUCOMA diag.)
         (RADIATION EFFECTS)

KVALIBOVA, S. B.

KVALIBOVA, S. B.:   "Pharmacological Properties of Preparations of Fragrant
Goosefoot -- Chenopodium Botrys L." Published by the
Acad Sci Turkemn SSR. Acad Sci Turkmen SSR. Department of
Biological and Agricultural Sciences. Ashkhabad, 1956.
(Dissertation for the Degree of Candidate in Veterinary
Science)

So: Knizhnaya Letopis', No. 18, 1956.

S/137/60/000/011/035/043
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 11, p. 251,
27246

AUTHORS: Tavadze, F.N., Tskitishvili, M.D., Doliashvili, K.A., Mandzhgalad-
              ze, S.N., Kvaliya, T.M., Nabichvrishvili, M.A.

TITLE: The Effect of Carbon and Silicon on Heat and Scale Resistance of
              Alloys of the Iron-Chrome-Manganese System

PERIODICAL: Dokl. Nauchno-proizv. konferentsii mashinostroiteley i priboro-
              stroiteley, Leningrad, Sudpromgiz, 1959, pp. 169 - 180

TEXT: The authors studied the joint effect of C and Si on heat and scale
resistance in cast and heat treated states of 2 series of alloys containing (in %):
C 1.04 - 3.92; Mn 13.19 - 15.61; Cr 12.90 - 15.40; Si 0.66 - 4.46; P 0.028 -
0.147 (I); C 0.25 - 3.82; Mn 14.14 - 15.38; Cr 24.03 - 25.90; Si 0.21 - 6.82;
P 0.04 - 0.25 (II); Heat treatment was conducted in vacuum quartz tubes by the
following two ways: 1) stabilizing at 700 and 750°C for 500 hrs; 2) homogenizing
at 1,050 - 500°C (stepped) for 350 hrs. It was established that during stabiliza-

Card 1/2

S/137/60/000/011/035/043
A006/A001

The Effect of Carbon and Silicon on Heat and Scale Resistance of Alloys of the Iron-Chrome-Manganese System

tion an increased C and Si content reduced heat resistance due to the formation of non-stable phases, namely austenite and carbides. During homogenization the alloys I show increased heat resistance, if their C content is 3.5 - 3.8%; the alloys II have 2 maxima of heat resistance: at 1.8 - 2.3% C; 0.3 - 1.0% Si and at 0.4 - 1.0% C and 6.0 - 7.0% Si. The alloys II show higher heat resistance after homogenization. The alloys investigated show satisfactory resistance to oxidation up to 750°C and are not subjected to "growth" up to 950°C. C impairs scale resistance of II and has no effect on I. Si impairs scale resistance of II. There are 9 references.

A.S.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

KVAL'VASSER, M.P.

USSR / Pharmacology, Toxicology. Chemotherapeutic Agents.   U-7

Abs Jour   : Ref. Zh.-Biol., No 2, 1958,   No 8135

Author   : Akovbyan, A.A., Zotova, M. E., Kval'vasser, M.P.

Inst   :

Title   : The Treatment of Luetic Patients According to the 1949 and
             1951 Schemes.

Orig Pub   : Za Sotz. Zkravookhr. Uzbekistana, 1955, No 1, 32-35.

Abstract   : When the luetic patients were treated with penicillin
             according to the schemes of 1949 and 1951, the average
             disappearance of Treponema pallidum from the syphilides
             occurred in 10 or 15 hours (from 3 to 38 hours); the other
             average data were as follows: epithelization of the chancre
             in 12.5 days, disappearance of roseola in 5.8 days, resorption
             of lenticular popules in 9 days, and disappearance of nodules

Card   : 1/2

USSR / Pharmacology. Toxicology. Chemotherapeutic Agents

Abs Jour   : Ref. Zh.-Biol., No 2, 1958, No 8135

Abstract   : in 14 days. Observations which had been made over periods
             of 3 months to 4 years revealed that 3.12% of patients had
             relapses, 2.67% of which were found serologically and 0.45%
             - clinically.

Card   : 2/2

/16·4400

32274
S/612/59/000/008/015/016
D218/D304

AUTHOR: Kval'vasser, V. I., Docent, Candidate of Technical
           Sciences

TITLE: On evaluating certain improper integrals by the opera-
           tor method

SOURCE: Kuybyshev. Industrial'nyy institut. Sbornik nauchnykh
           trudov, no. 8, 1959. Teplotekhnika; voprosy teorii ra-
           scheta i proyektirovaniya, 277-281

TEXT: The following theorems are used: 1) Integration of the image
function from p to ∞ corresponds to division of the original func-
tion by t, which is equivalent to

$$\int_p^\infty F(p)dp = \int_0^\infty \frac{f(t)}{t} e^{pt} dt \qquad (1;2)$$

2) Multiplication of two originals corresponds to the operation of

Card 1/3   X

32274
S/612/59/000/008/015/016
D218/D304

On evaluating certain ...

convolution in the domain of images. The author considers the in-
tegral

$$\int_0^\infty \frac{e^{-ax} - e^{-bx}}{x} \, dx = \ln \frac{b}{a}$$

$$(a > 0, \ b > 0) \qquad\qquad (2;1)$$

calculates it first by a classical method (for which he states not
to have found any indications in the existing literature) and then
by the operational method, which is found to be much simpler than
the former. The integral

$$I_1 = \int_0^\infty \left[I_0(ax) - \cos bx \right] \frac{dx}{x}$$

$$(a, b > 0) \qquad\qquad (2;8)$$

Card 2/3

On evaluating certain ...

where I_0 is the Bessel function of first kind and zero order, is calculated as follows: The image of $I_0(ax)$ - cos bx is $(1/\sqrt{p^2 + a^2}$ - $p/(p^2 + b^2)$; integrating this with respect to p from p to ∞ and applying Eq. (1;2), I_1 = ln(2b/a). The author derives also the well known Dirichlet integral and

$$I_3 = \int_0^\infty \frac{\sin at \sin bt}{t} dt$$

$$(a, b > 0)$$

(3;1)

He states that several other integrals quoted by B. P. Demidovich (Ref. 4: Sbornik zadach i uprazhneniy po matematicheskomu analizu (Collection of Problems and Exercises in Mathematical Analysis, Part 7, GITTL, 1952) are easily calculated by this method. There are 4 Soviet-bloc references.

Card 3/3

KVAL'VASSER, V.I., kand. tekhn. nauk; ANDRUSHEVICH, Yu.M., kand. tekhn. nauk, dotsent; NOVOSELOV, Yu.A., inzh.

Effect of torsional vibrations of the drive from the spindle to support in the 1811 semiautomatic relieving lathe on the quality of machined parts. Izv.vys.ucheb.zav.; mashinostr. no.4:160-167 '64.

1. Kuybyshevskiy politekhnicheskiy institut.   (MIRA 18:1)

AP4041990

AUTHOR: Kval'vasser, V.I.; Rutner, Ya.F.   S/0057/64/034/007/1170/1174

TITLE: On the problem of the expansion of a neutral plasma into an external magne-
tic field

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.7, 1964, 1170-1174

TOPIC TAGS: plasma flow, magnetic field plasma effect, electromagnetic field

ABSTRACT: Maxwell's equations for the vacuum are solved in closed form for the fol-
lowing initial and boundary conditions expressed in cylindrical coordinates r, z:
at time t = 0, the field is a uniform magnetic field parallel to the z axis and fill-
ing all space; at all times the field approaches a uniform magnetic field parallel
to the z axis and of the initial magnitude as r→∞; and at time t, the electric
and magnetic fields vanish for r < vt, where v is a constant less than the velocity
of light. The equations are also solved for the following conditions expressed in
rectangular Cartesian coordinates x, y, z: at time t = 0 the field is a uniform mag-
netic field parallel to the z axis and filling all space; at all times the field ap-
proaches a uniform magnetic field parallel to the z axis and of the initial magni-

1/2

Card

ACCESSION NR: AP4041990

tude as $|x| \to \infty$; and at time t, the electric and magnetic fields vanich for $v_1 t <$ $< x < v_2 t$, where v_1, v_2 are constants, $v_1 < v_2$, and both are less than the velocity of light. These solutions represent the fields of a perfectly conducting plasma ex- panding at constant speed into a uniform magnetic field from a line source or from a plane source. The analogous problem for a plasma expanding into a magnetic field from a point source has been discussed by S.Katz (J.of Math.Phys.2,1,1961). Orig. art. has: 37 formulas.

ASSOCIATION: none

SUBMITTED: 19Aug63

SUB CODE: ME,EM

NR REF SOV: 002

ENCL: 00

OTHER: 002

2/2
Card

L 41486-65   EWT(d)/T   IJP(c)

ACCESSION NR: AP4041390   S/0020/64/156/006/1273/1276

AUTHORS: Kval'vasser, V.I.; Rutner, Ya.F.

TITLE: A method for finding Green's function for boundary-value problems involving the heat equation, for a line segment with end-points moving at a uniform rate

SOURCE: AN SSSR. Doklady*, v. 156, no. 6, 1964, 1273-1276

TOPIC TAGS: boundary value problem, partial differential equation, parabolic equation

ABSTRACT: A method for finding GREEN's function for boundary-value problems involving the heat equation, for a line segment with end-points moving at a uniform rate. In general, boundary-value problems for the heat equation, for a region with variable boundary, lead to a system of VOLTERRA integral equations of the second kind. In the special case considered here, that of a line segment with end-points moving at a uniform rate, the heat equation is written in the form

$$\left(a\frac{\partial^2}{\partial z^2} - \frac{\partial}{\partial t}\right)G(z, t; z_0, t_0) = \frac{1}{2}\,\text{sign}(z_0 - z)\,\delta(z - z_0)\,\delta(t - t_0),$$

Card   1/3

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ACCESSION NR: AP4041390   0

where G is the GREEN function to be determined, subject to the (first
kind) boundary conditions

$$G(z, t; z_0, t_0)|_{z=t_0} = 0,$$

$$G(z, t; z_0, t_0)|_{z=l+v_1 t} = 0.$$

The problem is solved by first changing to a coordinate system fixed
relative to the moving left end-point of the line segment (letting
$\xi = z - v_1 t$, $\xi_0 = z_0 - v_1 t_0$), then taking Laplace transforms. This leads to
a pair of arbitrary functions, to be determined by the boundary
conditions, through an integral equation. A second application of
LAPLACE transform methods yields a different, equation. Finally,
the solution is given by:

$$G(\xi, t; \xi_0, t_0) = \frac{1}{2\sqrt{\pi a(t-t_0)}} \exp\left[\frac{v_1}{2a}(\xi_0 - \xi) - \frac{v_1^2}{4a}(t - t_0)\right] \times$$

$$\text{where} \quad \times \sum_{k=-\infty}^{\infty} \exp\left(-k^2 \frac{l_0 v_1}{a} - k \frac{v_1 \xi_0}{a}\right) \mu\,(2l_0 k + \xi_0),$$

Card 2/3

L 41486-65
ACCESSION NR: AP4041390

$$\mu(\xi_0) = \exp\left[-\frac{(\xi_0 - \xi)^2}{4a(l - l_0)}\right] - \exp\left[-\frac{(\xi_0 + \xi)^2}{4a(l - l_0)}\right]. \quad V_0 = V_2 - V_1, \quad L_0 = l + \nu_0 t_0$$

The author states that his method can be applied to the direct
solution of boundary-value problems of various types.

ASSOCIATION: None

SUBMITTED: 01Feb64

ENCL: 00

SUB CODE: MA   NR REF SOV: 004   OTHER: 001

Card 3/3

L 44146-65   EPF(n)-2/EPR/EPA(s)-2/EWG(v)/EWT(d)/T/EWA(l)   Pe-5/Ps-4/Pt-7/Pu-4
IJP(c)   GW

ACCESSION NR: AP5010072   R/0170/65/008/004/0479/0484

AUTHOR: Kval'vasser, V. I.; Rutner, Yu. F.

TITLE: Green's functions of boundary-value problems for the heat conduction equation for domains with uniformly moving boundaries

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 8, no. 4, 1965, 479-484.

TOPIC TAGS: boundary value problem, heat conduction equation, Green's function determination

ABSTRACT: It is indicated that there are no general methods for solving boundary-value problems for the heat conduction equation in the case of domains with movable boundaries. The authors present a way for determining the Green's functions of boundary-value problems for the heat conduction equation in two cases: a) for a half-line with a uniformly moving boundary, and b) for a straight-line segment with a uniformly and parallel moving boundary. Using the Laplace-transform method, expressions for the Green's functions are derived in closed form for case a) for boundary conditions of the first, second, and third kinds. In case b), the Green's functions are de-

Card 1/2

L 44146-65

ACCESSION NR: AP5010072

rived for three kinds of boundary conditions in a form similar to
that obtained for domains with fixed boundaries. It is indicated
that the Green's functions can be similarly obtained for other types
of boundary conditions. Orig. art. has: 18 formulas.   [LK]

ASSOCIATION: none

SUBMITTED: 17Jan64   ENCL: 00   SUB CODE: MA,TD

NO REF SOV: 005   OTHER: 000   ATD PRESS: 3247

Card 2/2 mB

KVAL'VASSER, Yu.G.; NAKHAMKIN, S.A.

Using universal filtration for recording radioactive emission. Vop.rud.
geofiz. no.4:121-129 '64.
(MIRA 18:1)

BIRMAN, A.Ye.; KVAL'VASSER, Yu.G.

Improved variation of the universal filter and its use in a
frequency analysis of transient signals. Vop. din. teor. raspr.
seism. voln no.6:212-220 '62.   (MIRA 16:7)
                   (Seismometry) (Electric filters)

BIRMAN, A.Ye.; GOL'TSMAN, F.M.; KARTAVTSEV, S.M.; KVAL'VASSER, Yu.G.;
NAKHAMKIN, S.A.

Seventeen-channel controlled directional device using delay
lines. Vop. din. teor. raspr. seism. voln no.4:230-241 '62.

(MIRA 15:10)

(Seismic prospecting—Electric equipment)

GORYUNOV, N.S., kand. tekhn. nauk (Dzhambul); KVAN, R.A., inzh. (Dzhambul);
    DANIL'CHENKO, N.V., inzh. (Dzhambul)

    Irrigation conditions of sugar beets in Kazakhstan. Gidr. i mel.
    16 no.7:3-13   Jl '64.   (MIRA 17:11)

KVANCHAKHADZE, G.Sh., kand. med. nauk; DZHANGAVADZE, O.Sh., nauchnyy sotrudnik; DANDUROV, A.B., kand. tekhn. nauk

Hygienic aspects of the operation of a corn picker. Gig. i san. 24 no.5:22-25 My '59.   (MIRA 12:7)

1. Iz Nauchno-issledovatel'skogo instituta gigiyeny truda i professional'-nykh zabolevaniy Ministerstva zdravookhraneniya Gruzinskoy SSR.
    (AGRICULTURE,
            hyg. aspects of use of corn-harvesting combine (Rus))
        (INDUSTRIAL HYGIENE,
            same)

PITSKHELAURI, G.Z.; KVANCHAKHADZE, G.Sh. (Tbilisi)

Providing additional training for general practitioners. Gig. truda
i prof. zab. 4 no.3:53-54 Mr '60.   (MIRA 15:4)

1. Nauchno-issledovatel'skiy institut gigiyeny i professional'nykh
zabolevaniy imeni N.I.Makhviladze.
                    (MEDICINE—CONGRESSES)

KVANCHAKHADZE, G.Sh.; DANDUROV, A.B.; KETILADZE, K.Ye.; CHINCHALADZE, G.G.; KURASHVILI, M.Ye. (Tbilisi)

Silicosis hazards at the Chiatura manganese mines. Gig. truda i prof. zab. 4 no. 7:48-49 Jl '60   (MIRA 13:8)

1. Institut gigiyeny truda i profzabolevaniy im. N.I. Makhviladze.
     (CHIATURA—LUNGS—DUST DISEASES)
                (MANGANESE—PHYSIOLOGICAL EFFECT)

MANDZHGALADZE, R.N., otv. red.; DZHANGAVADZE, O.Sh., red.;
    KVANCHAKHADZE, G.Sh., red.; KIPIANI, S.P., red.;
    KURASHVILI, M.Ye., red.; MDINARADZE, V.L., red.;
    ROKVA, V.A., red.; ROSTOMBEKOVA, N.V., red.;
    KHERODINASHVILI, A.Z., red.

[Materials of the scientific session dedicated to the 35th
anniversary of the Institute on June 4th – 6th, 1964] Ma-
terialy nauchnoi sessii, posviashchennoi 35-letiiu insti-
tuta, 4-6 iiunia 1964 g. Tbilisi, 1964. 110 p.
                                        (MIRA 18:1)
1. Gruzinskiy nauchno-issledovatel'skiy institut gigiyeny
truda i profzabolevaniy. 2. Gruzinskiy nauchno-issledo-
vatel'skiy institut gigiyeny truda i profzabolevaniy.

KVANT L. (......... Rehabilitchenk..., R.publika)

Prevention of cerebral insults. Zhur. nevr. i psikh. 65 no.10:1454-
1460 '65.
(MIRA 18:10)

KVANICA, L.

Swiss machines for the protection of plants. p.256.
(Mechanisace Zemedelstvi, Vol. 7, No. 11, June 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessiors (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

KVANIN, P.I.

Fastening the idle chain wheel of the rod supporting head.
Sbor. rats. predl. vnedr. v proizv. no.2:29 '61.

(MIRA 14:7)

1. Azerbaydzhanskiy truboprokatnyy zavod.
(Pipe mills)

KVANINA, L.I., MANZHIROVA, G.A., SVESHNIKOV, P.M., TOLOKOENIKOV, V.V., FOMIN, V.M., GRANT, M.N., VASTYUTINSKAYA, A.B.

"Akchagyl Deposits in the Lower Reaches of the Amu-Darya"
Dokl. Uz. SSR, 1953, No 12, 18-21, (Uzbekistan resume)

In 1952 in the lower reaches of the Amu-Darya during columnar drilling in a number of wells the drillers uncovered sandstone-clay deposits of the Akchagyl age with thicknesses up to several dozen meters. These deposits lie on an eroded surface of the Paleogene and are superimposed by ancient delta sedimentary deposits of the Anthropogene. The character of the ostracod fauna testifies to the strong fresh-water nature of Akchagyl gulf. (RZhGeol, No 3, 1954)

SO: W-31187, 8 Mar 55

1. KVANTALIANI, A. S.

2. USSR (600)

4. Millet - Georgia

7. Stubble-sown foxtain and proso millet for seed on irrigated areas of eastern Georgia /in Georgian with Russian summary/. Trudy Inst. pol. AN Gruz. SSR 6, 1951.

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

1. KVANTALJANI, A.S.

2. USSR (600)

4. Geology, Stratigraphic - Terek Valley

7. Stratigraphy of the Chokrak deposits of the Terek piedmont lowland, Izv.AN SSSR.
   Ser.geol. no. 3, 1952.

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

USSR/Human and Animal Physiology. The Nervous System.   V

Abs Jour: Ref. Zhur-Biol., No 6, 1958, 27440.

Author : G.S. Kvantaliann
Inst   : The Institute of Cardiology of the Academy of
          Sciences of the Georgian SSR.
Title   : The Status of Higher Nervous Activity Associated
          With Various Forms of Experimental Hypertension.

Orig Pub: Stenogr. otchet nauchn. sessii In-ta kardiol.
          AN GruzSSR, s uchastiyem In-ta fiziol. AN USSR. Tbilisi,
          AN GruzSSR, 1956, 124-128.

Abstract: In experimental renal hypertension in two dogs,
          along with an increase in blood pressure of from
          120-130 to 190-205 mm Hg, a brief increase in
          cortical excitation was observed (augmentation
          of salivation in response to a strong conditioned

Card   : 1/3

                              1/6

USSR/Human and Animal Physiology. The Nervous System.   V

Abs Jour: Ref. Zhur-Biol., No 6, 1958, 27440.

      food stimulus), along with subsequent weakening of
the processes of stimulation (a gradual decline in
reflex salivation) and inhibition (disturbance in
discrimination and prolongation of the extinction
time of a reflex); excitation of subcortical mech-
anisms was also seen (a sudden increase in uncondi-
tioned salivation). Analogous changes were ob-
served in one dog in the presence of reflex hyper-
tension (when the pressure still did not exceed
150-155 mm); Alterations in higher nervous activity
rose with the degree of elevation of the pressure
(up to 200 mm). Significant disturbances in higher
nervous activity (the absence of conditioned re-
actions) were observed from the very first day in
the case of kaolin (centrogenic) hypertension

Card   : 2/3

USSR/Human and Animal Physiology. The Nervous System.   V

Abs Jour: Ref. Zhur-Biol., No 6, 1958, 27440.

(one dog); subsequently salivation in response to
all stimuli was substantially reduced and disturb-
ances in inhibitory reactions were noted. In
the emergence and development of the forms of
hypertension studied, disturbances in the function
of the higher divisions of the CNS are of signifi-
cance.

Card   : 3/3

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USSR/Human and Animal Physiology - Nervous System.   T-10
        Higher Nervous System. Behavior.

Abs Jour   : Ref Zhur - Biol., No 7, 1958, 32238

Author   : Kventaliani
Inst   :
Title   : Change of Higher Nervous Activity During Experimental
               Renal Hypertension.

Orig Pub   : Tr. In-t klinich. i eksperim. kar diol. AN GruzSSR
               1956 (1957), 4, 189-197.

Abstract   : No abstract.

Card 1/1

- 154 -

USSR/Human and Animal Physiology (Normal and Pathological).   T-14
       Skin.

Abs Jour   : Ref Zhur - Biol., No 11, 1958, 51314

Author   : Kvantaliani, G.S.

Inst   : Institute of Clinical and Experimental Cardiology, Academy
       of Sciences Georgian SSR.

Title   : The Dynamics of Modifications in Conditioned Reflex activi-
       ty of Dogs in Various Forms of Experimental Hypertension.

Orig Pub   : Tr. In-ta klinich. i eksperin. kardiol. AN GruzSSR, 1956
       (1957), 4, 381-385.

Abstract   : After food conditioned reflexes (CR) were preliminarily
       produced in 5 dogs, and after norms of their blood pres-
       sure, pulse rate, and respiration rate were established,
       cortical hypertension (CH) was created in 2 of the dogs,
       a renal form of hypertension (CH) was created in 2 of the

Card 1/2

Kvantaliani;

USSR/Weeds and Weed Control. Herbicides.

M

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 1957, 69505

Author   : Kvantaliani
Title   : Agrotechnical Measures for Combatting Sorghum Alepens.

Orig Pub : Tr. In-ta polevodstva AN GruzSSR, 1956, 9, 17-39

Abstract : The experiments were conducted on the grounds of the Central
            base in the Institute of field culture, Academy of Sciences
            Georgian SSR. The soils are loamy and heavily clayey. Sor-
            ghum halepense [in the article it is called Alepense]. The
            main mass of roots is thick and lies in the arable land (0
            to 20 cm). Young growth which appears after 6 to 8 days af-
            ter gathering the grain is easily destroyed by plow PL-5-25
            to a depth of 8 to 10 cm. In the subsequent plowing 20 to
            25 days later to a depth of 15 to 17 cm, on an area of 1 m^2
            of the next sowing of corn, on the average 1 sprout remained
            where 14 to 18 sprouts remained previously in other forms of
            cultivation.

Card 1/1

KVANTALIANI, G. S. Cand Med Sci -- (diss) "Changes in higher nervous activity during various types of experimental hypertension." Tbilisi, 1957. 14 pp

(Tbilisi State Med Inst), 200 copies (KL, 3-58, 99)

-     -49-

MATESHVILI, G.I.; CHANISHVILI, I.V.; CHIMAKADZE, G.N.; KVANTALIANI,
G.S.; TELIYA, Z.A.

Study of the functions of the cardiovascular system in
different types of sports (Greco-Roman wreastling, fress-style
wrestling, table tennis). Trudy Inst. klin. i eksper. kard.
AN Gruz. SSR 8:519-524 '63.   (MIRA 17:7)

1. Institut kardiologii AN GruzSSR, Tbilisi.

KVANTALIANI, I. D.

KVANTALIANI, I. D.:   "Material on the problem of the effect of malaria
    on the female reproductive organs and pregnancy (clinical-
    experimental investigation)." Georgian State Publishing House
    for Medical Literature. Tbilisi State Medical Inst. Tbilisi,
    1956. (Dissertation for the Degree of Doctor in Medical Science)

Source: Knizhnaya letopis'   No. 28   1956   Moscow

KVANTALIANI, I.D.

Control of pospartum atonic hemorrhage of the uterus. Akush.i gin.
no.4:53-56 '61.   (MIRA 15:5)

1. Iz rodil'nogo doma No.1 Tbilisi (glavnyy vrach - doktor med.nauk
dotsent I.D. Kvantaliani) i akushersko-ginekologicheskoy kliniki
(zav. - prof. I.F. Zhordania) Tbilisskogo instituta usovershenst-
vovaniya vrachey.
                    (HEMORRHAGE, UTERINE)

KVANTALIANI, K.I.

Some problems for singular integrodifferential equations con-
taining a small parameter. Soob. AN Gruz. SSR 39 no.3:519-525
S '65.   (MIRA 18:10)

1. Tbilisskiy matematicheskiy institut imeni Razmadze AN
GruzSSR. Submitted December 12, 1964.

KVANTALIANI, K.I.

Integrodifferential equations of the Volterra type with small
parameters and highest derivatives. Soob.AN Gruz.SSR 26 no.3:
265-272 Mr '61.   (MIRA 14:4)

1. AN Gruzinskoy SSR, Tbilisskiy matematicheskiy institut im.
A.M.Razmadze. Predstavleno chlenom-korrespondentom AN Gruzinskoy
SSR N.P.Vekua.
                        (Integral equations)

16.4500

AUTHOR: Kvantaliani, K.I.

TITLE: On a boundary value problem for integro-differential
             equations of the Volterra type with small parameters with
             the higher derivatives

TEXT: Considered is the equation

$$\left[\sum_{k=0}^{s} \varepsilon^{k} a_{m+k}(t,\varepsilon) \rho_{\varepsilon}^{(m+k)}(t) + \sum_{j=0}^{m-1} \left[a_{j}(t,\varepsilon) \rho_{\varepsilon}^{(j)}(t) + \int_{0}^{t} K_{j}(t,\tau,\varepsilon) \rho_{\varepsilon}^{(j)}(\tau) d\tau \right] \right] = f(t,\varepsilon). \quad (1)$$

where $a_{s}(t,\varepsilon)$, $K_{j}(t,\tau,\varepsilon)$ and $f(t,\varepsilon)$ are given functions. The equation

$$a_{mo}(t)\varsigma^{(m)}(t) + \sum_{j=0}^{m-1} \left[a_{jo}(t)\varsigma^{(j)}(t) + \int_{0}^{t} K_{jo}(t,\tau)\varsigma^{(j)}(\tau)d\tau \right] = f_{o}(t) \quad (2)$$

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S/044/62/000/005/022/072
C111/C333

On a boundary value problem...

is designated as the degenerated equation of (1).
Problem K_ε: Determine the solution of (1) with the boundary conditions

$\varsigma_\varepsilon^{(n)}(1)=0$ $(n=0,\dots,m-1)$, $\varsigma_\varepsilon^{(m+j)}(0)=0$ $(j=0,\dots,l-1)$.

Problem K_o: Determine the solution of (2) with the boundary conditions

$\varsigma^{(n)}(1)=0$ $(i=0,\dots,m-1)$.
The author uses the N.P. Vekua method (RZhMat, 1961, 11B218) and finds sufficient conditions for the solution of K_ε to tend to the solution of K_o for $\varepsilon \to 0$.

[Abstracter's note: Complete translation.]

Card 2/2

KVANTALIANI, K.I.

Boundary value problems for small-parameter integrodifferential
equations. Soob. AN Gruz. SSR 30 no.5:545-552 My '63.

(MIRA 16:11)

1. Tbilisskiy matematicheskiy institut imeni A.M.Razmadze AN Gruz
SSR. Predstavleno akademikom N.P.Vekua.

SISAKYAN, N.M.; YEGOROV, I.A.; BERIDZE, G.I.; KVANTALIANI, N.

New methods for improving the quality of cognac. Biokhim. vin. no.7:
164-172 '63.   (MIRA 16:4)

1. Institut biokhimii imeni A.N.Bakha AN SSSR i Institut sadovodstva,
vinogradarstva i vinodeliya Gruzinskoy SSR.
                                        (Brandy)

BARABADZE, I.I.; BAKRADZE, G.S.; BERIDZE, G.I.; VAKHVAKHISHVILI, N.I.;
     GABUNIYA, G.A.; GABUNIYA, Sh.V.; GANGIYA, A.A.; GOGOBERIDZE, Ya.A.;
     DZIMISTARISHVILI, A.I. [deceased]; ZNAMENSKIY, K.F.; KVANTALIANI,
     N.A.; NIKOLAYSHVILI, V.S.; TOPADZE, L.I.; KHUNTSARIYA, A.G.; YAKO-
     BASHVILI, N.Z.; DZHOMARDZHIDZE, G.S., red.; ROYNISHVILI, N.I., red.;
     PRITYKINA, L.A., red.; KISINA, Ye.I., tekhn. red.

[Food industry of the Georgian S.S.R. during the last 40 years]
Pishchevaia promyshlennost' Gruzinskoi SSR za 40 let. Moskva,
Pishchepromizdat, 1961. 162 p.   (MIRA 14:9)
               (Georgia---Food industry)

NEBESNOV, Viktor Ivanovich, prof.; KVANTALIANI, N.Ye., inzh.,
    retsenzent; NAYDENKO, O.K., kand. tekhn. nauk, prof.,
    retsenzent; KOZHEVNIKOV, S.N., nauchn. red.; NIKITINA,
    R.D., red.

    [Problems in the joint operation of ship engines, propellers
    and the hull; studies with electronic analog computers] Vopro-
    sy sovmestnoi raboty dvigatelei, vintov i korpusa sudna; is-
    sledovaniia na EVMND. Leningrad, Sudostroenie, 1965. 246 p.
                                                (MIRA 18:9)
    1. Chlen-korrespondent AN Ukr.SSR (for Kozhevnikov).

KVANTALIANI, N.Ye.

Heat losses in the discharge of fluid under the pressure of hot
gasses. Inzh.-fiz.zhur. no.6:52-54 Je '60.   (MIRA 13:7)
(Gases)   (Heat--Transmission)

KRASIL'NIKOV, Boris Konstantinovich; MEZHENNYY, Vladislav
    Ivanovich; SIDOROV, Vasiliy Fedorovich; TSIRKIN, M.I.,
    retsenzent; PETROV, Yu.P., retsenzent; KVANTALIANI, N.Ye.,
    nauchn. red.; NIKITINA, R.D., red.

    [Experience in the automation of the control of marine
    diesel engines] Opyt avtomatizatsii upravleniia sudovy-
    mi dizeliami. Leningrad, Sudostroenie, 1965. 177 p.
                                        (MIRA 18:3)

KVANTOV, A.I. (Orsha)

Measuring the capacity of a condenser. Fiz. v shkole 21
no.6:71 N-D '61.   (MIRA 14:12)
                    (Condensers (Electricity))

KVANTRISHVILI, V.G., mashinist-instruktor

Locomotive engineer-instructor V. G. Kvantrishvili shares his
experience. Elek. i tepl. tiaga 2 no.7:35-38 Jl '58.   (MIRA 11:7)

1.Depo Moskva 1, Moskovsko-Kursko-Donbasskaya doroga.
                    (Electric locomotives)

KVAPIL', A. I. I LEPESHKIN, V. I.

42512. Peredovaya Kolkhoznaya Zverovodcheskaya Ferma. (Kolkhoz Krasnyy Oktyahr. Tobol. Rayon Tyumen. Obl.) Karakulevodstvo I Zverovodstvo, 1948, No. 6, S. 40-42.

KVAPIL', A. I.

24181   KVAPIL', A. I. Meropiyatiya po pod"emu kolkhoznogo krolikovodstva.
Karakulevodstvo i zverovodstvo, 1949, No. 4, S. 53-55.

SO: Letopis, No. 32, 1949.

KVAFIL', A. I.

Rabbits

State of rabbit farming and measures for developing it. Kar. i zver., 5, No. 4, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952, UNCL.

KVAPIL', Aleksey Ivanovich, kand.sel'skokhoz.nauk; SEREBRYAKOV,
Kapiton Mikhaylovich; BALAKIN, V.M., red.; LOGINOVA, Ye.I.,
tekhn.red.

[Organization of rabbit farms] Organizatsiia krolikoved-
cheskoi fermy. Moskva, Izd-vo M-va sel'.khoz.RSFSR, 1959.
39 p.   (MIRA 14:2)
                        (Rabbits)

KVAPIL', Aleksey Ivanovich; GUSEV, Boris Aleksandrovich; SEREBRYAKOV,
     Kapiton Mikhaylovich; ZAGORSKIY, G., red.; KUZNETSOVA, A.,
     tekhn. red.

     [Advice for the rabbit grower] Sovety krolikovodu. Izd.2.,
     ispr. i dop. Moskva, Mosk. rabochii, 1961. 134 p.
                                                    (MIRA 15:7)
               (Rabbits)

VAGIN, Ye.A., kand. sel'khoz. nauk; KVAPIL', A.I., kand. sel'-
       khoz. nauk[deceased]; KLETSKIN, P.T., kand. sel'khoz.
       nauk; UTKIN, L.G., kand. biol. nauk. Prinimal ucha-
       stiye KLADOVSHCHIKOV, V.F., kand. sel'khoz. nauk;
       ZAVARSKIY, A.I., red.

       [Fur farming and rabbit husbandry] Pushnoe zverovod-
       stvo i krolikovodstvo. Moskva, Kolos, 1965. 286 p.
                                          (MIRA 18:7)
       1. Nauchno-issledovatel'skiy institut pushnogo zvero-
       vodstva i krolikovodstva (for all except Zavarskiy).

KVAPIL, Bohumil, inz.

Effect of the dynamic stress on the susceptibility factor of resistance tensometers. Stroj cas 13 no.5:450-458 '62.

1. Konstrukta n.p., Trencin.

KVAPIL, F.; VICH, Z.

Tumours in childhood observed at the radiological clinic in Prague
in the years 1945-1960. Neoplasma 8 no.6:601-607 '61.

1. Radiological Clinic of the Charles' University, Prague, Czechoslo-
vakia.

(NEOPLASMS in inf & child)

L 36824-66   EWT(1)/T/EWP(e)   IJP(c)   WH
ACC NR: AT6020040   (A)   SOURCE CODE: UR/2564/65/005/000/0368/0372

AUTHOR: Kvapil, I. (Czechoslovak Socialist Republic); Kment, V. (Czechoslovak Socialist Republic); Barta, Ch. (Czechoslovak Socialist Republic)

ORG: none

TITLE: The application of acoustical thermal analysis to monocrystals of corundum

SOURCE: AN SSSR. Institut kristallografii. Rost kristallov, v. 5, 1965, 368-372

TOPIC TAGS: thermal acoustic effect, corundum, single crystal

ABSTRACT: The theory of thermal capacity of solids indicates that there exists a close correspondence between acoustic and thermal oscillation of the crystalline lattice. However, sound accompanying the thermal changes in crystalline lattices is quite weak and the introduction of amplification devices leads to a simultaneous enhancement of various background noises. To avoid this shortcoming, the authors decided to transmit signals at a high-frequency band much higher than the frequency of noises from the surrounding medium. Since this so-called acoustical thermal analysis produced interesting results in soft crystalline materials, the authors decided to test monocrystals of corundum with varying chromium content. The sensor contained a quartz plate with a resonant frequency of 100 kc, the temperature gradient could be raised up to 100C/min during heating by Pt-Rh electric oven up to 1600C. Results show that during fast temperature changes in

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L 36824-66

ACC NR: AT6020040

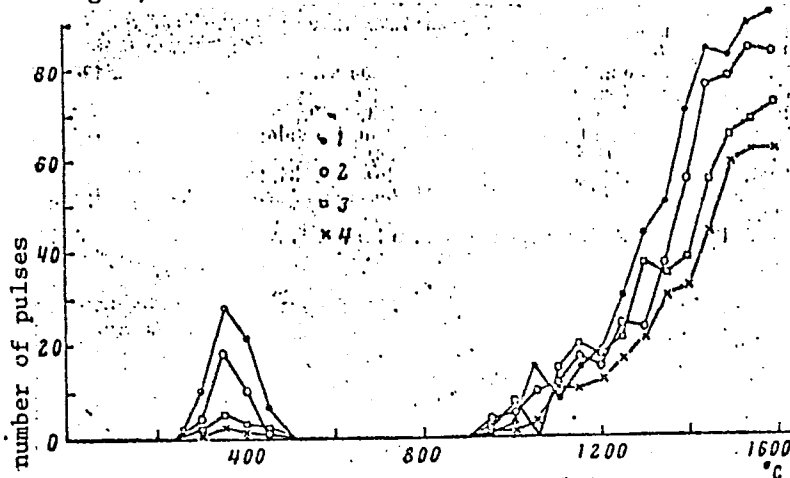large corundum crystals there appear pulsed sound waves at predominantly high frequencies (see Fig. 1).

Fig. 1 Frequency of sound pulses during the heating of corundum monocrystals with varying chromium content.
1 - 0.75; 2 - 0.37; 3 - 0.016% of chromium; 4 - monocrystal of technical white sapphire with traces of Cr.

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L 36824-66

ACC NR: AT6020040

The sound pulse production in the high temperature region is connected with the simultaneous action of tensions and of the temperature drop. Orig. art. has: 3 figures.

SUB CODE: 20/ SUBM DATE: 00/ ORIG REF: 000/ OTH REF: 008

Card 3/3

CZECHOSLOVAKIA / Analytical Chemistry.   Inorganic Analysis. E

Abs Jour   : Ref Zhur - Khimiya, No 23, 1959, No. 81921

Author   : Kvapil, Jan
Inst   : Not given
Title   : Determination of Potassium with Sodium
              Tetraphenyl Borate in the Quality Control of
              the Production of Potash

Orig Pub   : Kvasny prumysl, 1958, 4, No 4, 87

Abstract   : For the determination of K in the quality
              control of the production of potash, the use of
              sodium tetraphenyl borate is recommended. The
              sample is evaporated with conc. HCl and HNO$_3$
              (to remove ammonium salts); the residue is
              dissolved in water; the solution (30-40 mg K)
              is acidified, using methyl orange as indicator;
              it is heated to 60-70°, and 25 ml 2% solution

Card 1/2

Abs Jour   : Ref Zhur - Khimiya, No 23, 1959, No. 81921

of sodium tetraphenyl borate is added while
stirring. Upon cooling, the residue is fil-
tered off, washed three times on a filter
with a saturated solution of soium tetraphenyl
borate, dried for one hour at 105° and weighed.
-- T. Zvarova

Card 2/2

CZECHOSLOVAKIA

KVAPIL, Jiri

Preparation of sodium tetraphenylborate. Jiři Měčl, Jiři Kvapil, and Oto Leman. Chem. průmysl 9, 77(1959). The procedure of Ievins and Gudriniece (C.A. 49, 2040e) was used to prep. Ph₄BNa from PhMgBr and BF₃-Et₂O, except that, instead of isolation with Na₂CO₃, the authors prepd. the ammonium salt and converted it with NaOMe to the aq. Na salt in 55 to 60% yield.   J. L.

4E3d
2,may
4E2c
4

KVAPIL, J.; STIKSA, E.; SNAID.V.

Experiences with anesthesia in gynecological surgery and comments
on current problems. Cesk. gynek. 29 no.5:387-390 Je'64.

1. I. gyn.-por. klin. fak. vseob. lek. KU [Karlovy university]
v Praze; prednosta: prof. dr. K.Klaus, DrSc.

KVAPIL, Jiri; CECH, Evzen; STRIBRNY, Josef

Experience with hydroxydione in labor. Cesk. gyn. 27[41] no.5:413-415 Je '62.

1. I gyn.-por. klin. KU v Praze, prednosta prof. dr. K.Klaus, DrSc.
     (HYDROXYDIONE ther)   (ANESTHESIA OBSTETRICAL)

CERNY, J. KALOUSKOVA, J.;KVAPIL, J.

Experiences with divinyl ether in short obstetrical opera-
tions. Cesk. gynek. 29 no.9:661-663 N ' 64

1. I. gyn-por. klin. fak. vseob. lek. Karlovy University
v Praze (prednosta prof. dr. K.Klaus, DrSc).

KALOUSKOVA, J.; KVAPIL, J.; NEUGEBAUEROVA, L.; KANDRAC, M.

Use of hydroxydione in cesarean section. Cesk. gynek. 29 no.9:663-666 N ' 64

1. I. gyn-por.klin. fak. vseob. lek. Karlovy University v Praze (prednosta prof. dr. K.Klaus, DrSc) a III. in^ ... klin. fak. vseob. lek. Karlovy University v Praze (prednosta akademik J. Charvat).

KVAPIL,J.; CECH, E.; KALOUSKOVA, J.

Experiences with the use of hydroxydione for analgesia in labor. Cesk. gynek. 29 no.9:648-650 N ' 64

1. I gyn. - por. klin. fak. vseob. lek. Karlovy University v Praze (prednosta prof. dr. K. Klaus, DrSc.)

Pharmacology and Toxicology

CZECHOSLOVAKIA

KVAPIL, J.; LISKA, M.; Farmakon, National Enterprise (N.P.),
Olomouc.

"Determination of 2,3-Isopropylidene-L-sorbose   and 2,3,4,6-
Diisopropylidene-L-sorbose in Preparation of L-Ascorbic Acid."

Abstract /Authors' English summary modified_/: The two chemicals
may be determined either by a method based on hydrolysis or one
based on polarimetry. Hydrolysis is conducted at pH = 3 and
at boiling. Acetone is liberated and determined by Messinger's
method. Sorbose is protected from oxidation by addition of tetra-
borate with which it forms a complex. Polarometric determina-
tion is made in a medium of toluene where the substances have a
high specific rotation.   2 Figures, 2 Tables, 2 Western, 2 Czech,
2 Russian references. (Manuscript received 7 Dec 65).

1/1

AUTHOR: Brezina, B.; Safrankova, M.; Kvapil, J.
    [Brezina, Safrankova]   [Kvapil]
ORG: Institute of Physics, Czechoslovak Academy of Sciences, Prague; Research Insti-
tute of Single Crystals, Turnov

TITLE: Ferroelectric properties of solid solutions of triglycine sulfate and fluo-
beryllate crystals

ABSTRACT: Solid solutions of ferroelectric TGS and TGFBe single crystals were pre-
pared by the dynamic cooling of aqueous solutions. Various physical properties of
the solid solutions were measured for different relative concentrations of the single
crystals. It was found that the phase transition temperature is not a linear function
of the concentration while the variations of the permitivity of solutions of all con-
centrations with temperature obey the Curie-Weiss law. It was also found that the co-
ercive field of TGS-TGFBe solid solutions increases with increasing TGFBe content.
The authors thank Mr. J. Novák for an appraisal of the analytical methods and Mr. K.
Bernatzik for help in growing the single crystals. The authors also thank Dr. J.
Fousek and Dr. Z. Hauptman for suggestions which helped to improve the manuscript,

Card 1/2

ACC NR: AP6019268

and Dr. V. Janovec and Dr. V. Dvorák for valuable discussions. Orig. art. has: 7 figures, 3 formulas.

SUB CODE: 20/   SUBM DATE: 26Nov65/   SOV REF: 002/   OTH REF: 011

Card 2/2

KVAPIL, J.

Influence of crystallization conditions on the purity of crystals. Jiří Mál and Josef Kvapil (Vysoká škola chem. technol., Pardubice, Czech.). Chem. průmysl 9, 628-30 (1959).—It is demonstrated that the Doerner-Hoskins law (cf. C.A. 10, 1364) giving the content of impurities in crystals in relation to the content of impurities in a mother liquor, which was derived for equil. between the soln. and the surface of crystal, can be used also in cases of the equil. between the surface of crystal and the thin film of soln. surrounding this crystal.

P. Oefelein

S/564/61/003/000/002/029
D258/D304

AUTHORS: Shmid, Y., Kvapil, Y., Myl, Y., and Sholts, Z.
                   (Czechoslovak Socialist Republic)

TITLE: The influence of supersaturation on the formation of
                   parasitic crystals

SOURCE: Akademiya nauk SSSR. Institut kristallografii. Rost
                   kristallov, v. 3, 1961, 273-277

TEXT: This paper is the first of a series concerned with the factors
influencing crystal growth, especially in chemical technological pro-
cesses. The authors determined the lower limit of the metastable region
for the supersaturated solutions of monoammonium phosphate (MAP), di-
potassium (d)-tartrate (DPT), potassium alum, and Seignette's salt. This
limit was set in a dynamic process by recording the solution temperature
at which the first crystals were formed. The temperature of saturation
was read at the time at which the neighborhood of the first formed crys-
tal was optically homogeneous. The apparatus is shown in Fig. 1. A

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S/564/61/003/000/002/029
D258/D304

The influence of...

powerful light source situated opposite the observing stereo-microscope emits parallel rays across the plexiglass container. Another light source, at $90°$ from the first one, illuminates a small section of the bottom and traps each crystal as it comes down. The microscope is simultaneously focused onto the illuminated part of the bottom and on part of the parallel rays. Salts of analytical grade were used and the results checked against those obtained with optically pure solutions. The latter were made by partly dissolving crystals with the aid of steam, draining the resulting solution, and then distilling water into the container in order to dissolve the remainder of the crystals. This final solution, saturated at $55°C$, remained stable for 20 hours at $0°C$. The lower limit of the metastable region was found to be a function of overheating. Lowered curves of temperature v. concentration resulted for increasingly higher overheating. These curves were approximately parallel with the curve of solubility for overheating periods of 1 hour. Thus, when overheating by $30°C$, the temperature of crystallization of DPT was lowered by $10°C$ and that of MAP by $15°C$; that of Seignette's salt was lowered by $18°C$ and that of potassium alum by $30°C$. There are 6 figures and 9

Card 2/𝟇 3

The influence of...

S/564/61/003/000/002/029
D258/D304

references: 1 Soviet-bloc and 8 non-Soviet-bloc. The references to the English-language publications read as follows: R. P. Rastogi, J. Amer. Chem. Soc., 3129, 1952; B. S. Strikantan, J. Indian Chem. Soc., 29, 674, 1952; A. Seidell, Solubilities, I. N. Y., 1953, p. 101; Huai Ting Hsü, L. Warren, McCabe, Ind. Engng. Chem., 26, 1201, 1934.

ASSOCIATION: Department of Physical Chemistry, Chemical Technological
                College, Pardubice; Institute of Mineral Research

Card 3/8

S/081/62/000/022/030/088
B158/B101

AUTHORS: Šmíd, Josef, Kvapil, Josef, Hnízdil, Jindřich

TITLE: Method of preventing formation of parasitic crystals

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1962, 292, abstract
            22194 (Czechoslovak patent 98594; February 15, 1961)

TEXT: When single crystals are grown by existing methods, particularly in
crystallizers operating at a high temperature under thermostatic conditions,
parasitic crystals may form on the walls of the apparatus and on the sur-
face of the mother liquor, lowering the product yield and hampering the
process. This defect is eliminated by allowing an unsaturated layer to
form on the surface of the mother liquor as a result of constant dripping
of a solvent which condenses on the surface of a cooler in the upper part
of the vapor space of a crystallizer. The tubes of the cooler are best
arranged along the walls of the apparatus. [Abstracter's note: Complete
translation.]

Card 1/1

L 43580-65 EWT(1)/EWT(m)/EPF(c)/EWP(j)/T/EWP(t)/EEC(b)-2/EWP(b)/EWA(c)
Pc-4/Pr-4/P1-4 IJP(c) JD/GG/RM

ACCESSION NR: AT5009582 Z/0000/62/000/000/0155/0157

AUTHOR: Kvapil, J. (Kvapil, Y.); Solc, Z. (Sholts, Z.)

TITLE: Growing single crystals of triglycine sulfate

SOURCE: Konference o monokrystalech. 4th, Turnov, 1961. Sbornik referatov. Turnov, VUM, 1962, 155-157

TOPIC TAGS: triglycine sulfate crystal, crystal growth, single crystal

ABSTRACT: After reviewing previous work on the composition of the triglycine sulfate solutions from which TGS crystals are grown, the present authors analyze the proportion of sulfuric acid to glycine in such solutions and find that this need not be exactly 1:3. They proved that TGS crystals grow in solutions varying in proportion from 1:2.5 to 1:3.5. They also studied the effect of heat on crystal growth and found that overheating stabilizes the saturation point, after which gradual cooling produces the first crystals at the lower boundary of the metastable zone. An electronic source of time impulses was used to establish the saturation point and to control the cooling rate. The many factors involved in crystal growth are described, including saturation temperature, overheating temperature and period, cooling rate, mechanical factors such as size and speed of mixing paddles, and the several types of diffusion in the solutions used. In growing TGS crystals, it is

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L 43580-65

ACCESSION NR: AT5009582

2

best to employ core rods 7 cm long, cut with a thread saw along their longitudinal axis, with pinacoidal areas on their surface to produce somewhat cloudy crystals. Solutions employed had saturation points at 45-50C, which produced crystals weighing 450 grams as they cooled under automatic control in 3-liter crystallizers. Under precise schedules of declining temperature for each successive day, crystals with a density of 1.68 grew at a rate of 0.2 cm in diameter per day. Orig. art. has: 5 figures and 5 tables.

ASSOCIATION: VUM, Turnov; VSCHT, Pardubice

SUBMITTED: 00   ENCL: 00   SUB CODE: OC, SS

NO REF SOV: 003   OTHER: 015

Card 2/2

S/058/62/000/012/035/048
A062/A101

AUTHORS: Myl, J., Kvapil, J.

TITLE: Application of sound effects to determine crystal lattice changes

PERIODICAL: Referativnyy zhurnal, Fizika, no. 12, 1962, 2,
             abstract 12E10 ("Collect. Czechoslow. Chem. Communs",
             1962, 27, no. 5, 1099 - 1104, German; summary in Russian)

TEXT: It was found that processes, giving rise to sudden changes of the
crystal lattice, are accompanied by sound effects which usually are below the
audibility range. A simple arrangement was designed which permitted to record
the appearance of such sounds while crystals were heated. Thus it is possible to
determine the temperatures at which sudden transformations of crystalline modi-
fications or sudden changes of thermal expansion, etc., take place.

[Abstracter's note: Complete translation]

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S/058/63/000/001/116/120
A062/A101

AUTHOR: Mýl, J., Kvapil, J.

TITLE: Application of acoustic methods for indicating crystal lattice
             changes. I. Study of the changes in chemical processes.

PERIODICAL: Referativnyy zhurnal, Fizika, no. 1, 1963, 73, abstract 1Zh437
             ("Collect. Czechosl. Chem. Communs", 1962, v.27, no. 7, 1517 - 1520,
             German; summary in Russian)

TEXT: To investigate chemical reactions of solid substances, use was made
of the method of recording the acoustic effects that take place in heating of
crystals, liberation of gases, dehydration processes of thermal decompositions,
etc. The results are compared with the data of the differential thermal analysis.

[Abstracter's note: Complete translation]

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MYL, Jiri; SOLC, Zdenek; KVAPIL, Josef

Crystallization parameters of technically important
salts. Sbor VSChT Pardubice no.1:89-96 '63.

1. Chair of Inorganic Technology, Higher School of Chemical
Technology, Pardubice, and Research Institute of Minerals,
Turnov.

L 23086-65
ACCESSION NR: AP4047665   z/0009/64/000/010/0507/0510

AUTHOR: Bibr, B.; Kvapil, J. (Kvapil, J.)

TITLE: Growing single crystals from solution by lowering temperature

SOURCE: Chemicky prumysl, no. 10, 1964, 507-510

TOPIC TAGS: single crystal growth, saturated solution, crystal nucleus, crystallization center, growth rate, alum, rochelle salt, sodium nitrate

ABSTRACT: This article describes the principal factors affecting the growing of single crystals (principally ADP, DKT, EDT, TGS, TGFB, SHA, and $NaNO_3$ crystals, Rochelle salts, and various alums) by lowering temperature, and reports on the study of the effect of preparing the solution before the growing cycle. A calculation method is described for the programmed lowering of temperature during the crystal growth cycle. The parameters directly affecting the width of the metastable zone are studied and their estimation is made from the point of view of the requirements of the technology of growing single crystals from solution. The present method for calculating the speed of temperature lowering during the growing cycle is described on this basis. Up to the present, temperature drop, which

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has the greatest influence on the economy of the process, was controlled on the basis of empirical observations made by the personnel and technicians growing the crystals. The effect of the presence of a nucleus on the width of the metastable zone of potassium tartrate DKT with and without mixing was investigated. Crystallization was carried out in laboratory crystal-pans, the mixer with the nucleus rotated at a speed of 10 - 50 rpm, and the direction of rotation changed every 1 - 2 minutes of operation. The calculation of temperature lowering in growing Rochelle salt single crystals is given as a sample solution. The length of the growing cycle is decisive from the point of view of economy, in comparison with which the time required for preparation operations is negligible. For this reason it is necessary to ensure a solution of maximum concentration by maintaining the maximum temperature during heating. The growing cycle itself must proceed near the upper limit of the metastable zone to ensure growth without defects. Maintaining a constant linear growth rate ensures minimum crystallization time. It is also necessary to maintain a precisely calculated temperature regime. As an example, the calculation of a nomogram of the temperature regime for the whole growth cycle is illustrated. Nomograms are also given for ADP, TGS, Rochelle salts, and sodium nitrate, and the correctness of the nomograms

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ACCESSION NR: AP4047665

were verified under laboratory and production conditions.   Orig. art. has: 7
figures and 5 formulas.

ASSOCIATION: Vyzkumny ustav monokrystalu, Turnov (Research Institute for
Single Crystals)

SUBMITTED: 28Feb64   ENCL: 00   SUB CODE: SS

NO REF SOV: 002   OTHER: 010

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25(1)   PHASE I BOOK EXPLOITATION   CZECH/2526

Kvapil, Ladislav; Bedřich Solný, Engineer; and Vlastimil Kalášek, Engineer

Elektricke odporove pece, (Electric Resistance Furnaces) Praha, Státní Nakledatelství Technicke Literatury, 1958. 235 p. (Series: Elektrotechnická minima, Sv. 26) 2,200 copies printed.

Reviewer: Zdeněk Ryska, Doctor, Engineer, Docent; Resp. Ed.: Ludvík Kačerovský; Tech. Ed.: Libuše Hokrová; Managing Ed. for Literature on Electrical Engineering: František Kašpar, Doctor, Engineer.

PURPOSE: The book is intended for workers, foremen, and economists concerned with electric furnaces. It should facilitate selection of the equipment adequate for any given plant.

COVERAGE: The book briefly explains electrotechnical and thermal fundamentals. The types of electric resistance furnaces mass-produced in Czechoslovakia are described. Construction, servicing, maintenance, and repair of mechanized furnaces for

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Electric Resistance Furnaces   CZECH/2526

    special purposes are described as are resistance furnaces with
protective atmosphere and devices for producing the atmosphere.
No personalities are mentioned. There are no references.

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  14. Capillary brazing of copper   224
  15. Electric furnaces in operation   232

AVAILABLE: Library of Congress (TK4661.K9)
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Card 3/3   11-20-59

KVAPIL, M

CZECHOSLOVAKIA/Analytic Chemistry - Analysis of Inorganic   E-2
                    Substances.

Abs Jour   : Ref Zhur - Khimiya , No 14, 1958, 46425

Author   : Miroslav Kvapil
Inst   :
Title   : Analysis of Calcites, Dolomites, Ankerites and Magnesi-
               tes in Presence of Great Amounts of Manganese.

Orig Pub   : Rudy, 1957, 5, No 12, Prace vyzkumn. ustavu, 1957,
               Priloha No 7, 4-6.

Abstract   : Determination methods of ash, SiO_2, R_2O_3 (Fe_2O_3), CaO
               and MgO in calcites, dolomites, ankerites and magnesi-
               tes are described. Ash is determined by calcining the
               sample to be analysed 1 hour at $1000°$, SiO_2 is deter-
               mined by the usual method (after the decomposition of
               the sample with a mixture of HCl and HNO_3, filtering
               off the insoluble residue and removing SiO_2 in the
               form of H_2SiF_6 from the residue by treating it with HF),

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CZECHOSLOVAKIA/Analytic Chemistry - Analysis of Inorganic   E-2
            Substances.

Abs Jour   : Ref Zhur - Khimiya, No 14, 1958, 46425

            R_2O_3 is determined by the precipitation of hydroxides
            with hexamethylenetetramine (in the filtrate after the
            insoluble residue has been filtered off), Fe_2O_3 is
            determined by the Zimmermann - Reihardt method (in the
            R_2O_3 precipitate), the total of CaO + MgO is determined
            by chelatometric titration in the presence of eriochrome
            black T, CaO is determined by chelatometric titration
            in the presence of murexide, and MgO is determined by
            the difference. In the presence of less than 2% of Mn,
            it is masked with triethanolamine, and in the presence
            of more than 2% of Mn, it is separated by extraction
            with chloroform after an addition of cupral.

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