ARKHIPOVICH, N.A.; ZELENINA, L.M.; KVITA, S.N.

Titration method for the control of work of settlers and mud thickeners. Sakh.prom. 37 no.9:44-45 '63. (MIRA 16:9)
(Sugar manufactu)

FRAGNER, Petr, KVITA, Vratislav

Mycostatic effect of certain quinoline derivatives. Cesk.derm. 31 no.4:220-222 Aug 56.

1. Z krajske hygienicko-epid. stanice Knv Praha, reditel MUDr L.Hofta, a z II. kozni klin. SFN v Praze, predn. prof. MUDr K.Hubschmann (for Fragner) 2. Z Vyzkumneho ustavu pro farmacii a biochemii v Praze (for Kvita)

(QUINOLINES, eff.
8-hydroxyquinoline & deriv., mycostatic eff. (Cz))
(FUNGI, eff. of drugs on
8-hydroxyquinoline & deriv., mycostatic eff. (Cz))

KVITA, VRATISLAV

Studies in the vitamin K and E series. I. Improved preparation of vitamin K_1. Vratislav Kvita, Jaroslav Welchet, and Václav Trčka (Pharm. Biochem. Research Inst., Prague). *Chem. Listy* 50, 1979–81(1956).—The authors modified the method of Hirschmann, *et al.* (*C.A.* 49, 1219g), using $AlCl_3$ as condensing agent and PbO_2 as oxidant. A new method is described for isolating *1-acetoxy-4-hydroxy-2-methylnaphthalene* (I). 1,4-Diacetoxy-2-methylnaphthalene (II) (60.7 g.), 450 ml. MeOH, and 25 ml. 28% aq. NH_4OH was heated to 45° under N, left standing 24 hrs., evapd. *in vacuo* at 30°, the residue dissolved in 160 ml. MeOH, decolorized with C, filtered and the filtrate gradually dild. with small portions of H_2O (125 ml. total). During the addn. 36.9 g. brown crystals of I sepd., m. 123°, sufficiently pure to be used in the next step. I (3.56 g.), 5.92 g. phytol, and 40 ml. abs. Et_2O was dropped at 18–20° under N and stirring into 4 g. $AlCl_3$ in 40 ml. abs. Et_2O, the mixt. stirred 3 hrs., washed with H_2O, the Et_2O layer evapd., and the oily residue taken up with 20 ml. ligroine. After sepg. unreacted II, the filtrate was extd. with 2% KOH, Claisen alkali, and 5% $Na_2S_2O_4$. After dilg. the alk. soln. with 1% $Na_2S_2O_4$, the product was extd. with Et_2O and oxidized by shaking 30 min. with 12 g. PbO_2 to give, on filtration and evapn. of Et_2O, 6.6 g. orange oil, n_D^{25} 1.5240, contg. 95 ± 2% *3-phytyl-2-methyl-1,4-naphthoquinone* (III). Treatment of 15 g. III in 150 ml. Ac_2O with 15 g. Zn dust and 10 ml. pyridine yielded 15.5 g. *diacetate of dihydrovitamin* K_1, m. 59°. Hydrogenation of 1.5 g. II in pyridine on Lindlar's catalyst followed by 48-hrs. treatment with 3 ml. $MeSO_2Cl$ at 3° gave, on addn. of 100 ml. H_2O, 1.24 g. *dimesylate of dihydrovitamin* K_1, m. 114–15° (from MeOH).

—L. I. Urbánek

KVITA, V.; WEICHET, J.; TRCKA, V.

"Studies on the vitamin K and vitamin E series. I. An improved preparation of Vitamin K1. II. Synthesis of the vitamin K analogs with a more simple side chain. In German.

P. 583. Journal on chemistry and biochemistry issued by the, (Czechoslovak Academy of Sciences.) Vol. 22, no. 2, Apr. 1957.

SO: Monthly Index of East European Accession (EEAI) LC, Vol. 7, No. 5 May 1958

- KVITA, VRATISLAV

CZECHOSLOVAKIA/Organic Chemistry - Synthetic Organic Chemistry. G-2

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 25084

Author : Kvita Vratislav, Weichet Jaroslav
Inst : -
Title : New Method for the Preparation of 5-Methyl-Cyclohexanedi-one-1,3

Orig Pub : Chem. listy, 1957, 51, No 2, 380-381; Sb. chekhosl. khim. rabot, 1957, 22, No 3, 1064-1065

Abstract : To Na-malonic ester (from 18 g Na and 132.6 g malonic ester) are added, at 90° and within 45 minutes, 78 g pentene-2-one-4, after which the mixture is heated for 6 hours on a boiling water bath with 500 ml 18% aqueous NaOH, to get 5-methyl-cyclohexanedione-1,3 (I) in the form of the monohydrate, yield 70.5%, MP 75-85°. By recrystallization of monohydrate from $CH_3COOC_2H_5$ is obtained the anhydrous I, MP 126-127°; dioxime, MP 155°.

Card 1/2

CZECHOSLOVAKIA/Organic Chemistry - Synthetic Organic Chemistry. G-2

Abs Jour : Ref Zhur - Khimiya, No 8, 1958, 25084

In 60% alcohol, in the presence of several drops of piperidine, I reacts very readily with aldehydes, to form, with yields of 85-95%, the corresponding alkylidene-bis-5-methyl-cyclohexanediones-1,3, which have sharp melting points and can be used to identify aldehydes. There have been prepared the derivatives of I with CH_3CHO (MP 111°), $CH_3CH{=}CHCHO$ (MP 178°), and with 3,4,5-trimethoxy-benzaldehyde, MP 189°.

Card 2/2

5

3

1/4

Studies in the vitamin K and E series. II. A synthesis of vitamin K analogs with a simplified side chain. Jaroslav Weichet, Vratislav Kvita, and Václav Trčka (Výzkumný ústav farm. biochem., Prague). *Chem. listy* 51, 137-32(1957); cf. *C.A.* 51, 10457*d*.—Me alkyl ketones $Me(CH_2)_nCOMe$ (I) (*n* = 11, 12, 14, 15, 16) and NaC:CH gave $Me(CH_2)_nCMe(OH)C:CH$ (II) whose hydrogenation yielded $Me(CH_2)_nCMe(OH)CH:CH_2$ (III). Condensation of III with 4-acetoxy-3-methyl-1-naphthol (IV) gave $RCH_2CH:CMe(CH_2)_nMe$ (V) (R = 2-methyl-1,4-naphthoquinon-3-yl) which were reduced to their *dihydro diacetates* (VI) for characterization. According to the measurements of Quick's time the compd. V (*n* = 14) was found to approach the effect of vitamin K_1 most closely. I were prepd. by the reaction of acid chlorides with $EtOMgCH(CO_2Et)_2$ according to Bowman (*C.A.* 44, 4889*b*) (*n*, % yields, m.p., b.p./mm., and m.p. of semicarbazone given): *11*, 80, 33-4°, 103°/0.6, 116-17°; *12*, 84, 39-40°, 104-6°/0.7, 123-4°; *14*, 83.3, 49°, 144°/0.9, 127°; *15*, 70.8, 51°, 145°/0.7, 125°; *16*, 75, 52-4°, 162°/1.5, — (oxime, m. 77°). Satg. 450 ml. liquid NH_3 with C_2H_2 in a 2-l. flask, adding over 30 min. 10.35 g. Na, continuing the addn. of C_2H_2 for another 15 min., adding with stirring 0.225 mole I in 400 ml. Et_2O, passing C_2H_2 through the reaction mixt. an addnl. 30 min., stirring the mixt. 3 hrs., allowing to come to room temp. overnight, pouring the thick residue onto 100 ml. concd. HCl and 400 g. ice, sepg. the ether layer, extg. the aq. layer with 150 ml. Et_2O, washing the ether soln. with dil. HCl, then with a satd. soln. of NaCl, distg. the ether *in vacuo*, dissolving the residue in 300 ml. MeOH, adding 15 g. $NH_2NHCONH_2.HCl$ and 15 g. cryst. AcONa in 65 ml. H_2O, refluxing the mixt. 30 min., filtering off the semicarbazone, evapg. the filtrate, dissolving the residue in 200 ml. Et_2O, adding 36 ml. H_2O, sepg. the ether layer, extg.

Weichet, Jaroslav et al

the aq. layer with ether, washing the ether ext. with HCl and satd. NaCl soln., and distg. the ether soln. gave II (n, % yield, m.p., b.p./mm. given): *11*, 71, 20–2°, 103°/0.05; *12*, 73, 19–21°, 105–10°/0.1; *14*, 71, 31–2°, 116°/0.05; *15*, 61, 43–4°, 140–2°/0.1; *16*, 56, 36–7°, 152–8°/0.1. Hydrogenation of II according to Isler, *et al.* [*Z. physiol. Chem., Hoppe-Seyler's* 295, 200(1953)], gave almost quant. yields of III (*n*, m.p., and b.p./mm. given): *11*, 21°, 90°/0.05; *12*, 20°, 112°/0.1; *14*, 33°, 128°/0.06; *15*, 48.5°, 133°/0.06; *16*, 35–6°, 137°/0.2. Heating 8 g. IV, 50 ml. dioxane, 4.9 ml. BF_3-Et_2O, and 8.8 g. anhyd. $ZnCl_2$ to 50° under N, adding during 30 min. 0.018 mole III in 30 ml. dioxane, keeping the mixt. 25 min. at 50° with stirring, dilg. with 200 ml. Et_2O, washing the ether soln. twice with 100 ml. H_2O, twice with 100 ml. 5% $NaHCO_3$, again twice with 100 ml. H_2O, drying with Na_2SO_4, evapg. in vacuo, stirring the light brown residue with 100 ml. petr. ether, removing the deposited starting IV, washing it with 50 ml. petr. ether, washing the filtrate with 100-ml. portions 2% KOH until the aq. layer remained colorless, shaking the org. soln. with 135 ml. Claisen alkali and 15 ml. 5% $Na_2S_2O_3$,

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Weichet, Jaroslav + Etc.

3.

washing the aq. layer with 50 ml. petr. ether, shaking the org. layer with 750 ml. 3% $Na_2S_2O_4$ and 500 ml. Et_2O, drying the combined ether solns. with Na_2SO_4, shaking 30 min. with 4.4 g. Ag_2O, filtering, evapg. the filtrate in vacuo, and recrystg. the residue from 1:1 MeOH-EtOH gave V (method *A*). Adding 4 g. $AlCl_3$ in 40 ml. Et_2O to a cold (0°) soln. of 8.64 g. IV, 0.02 mole III, and 40 ml. Et_2O, keeping the mixt. 3 hrs. at 0°, dilg. with 100 ml. H_2O, washing the ether layer to neutrality, evapg. the ether, stirring the residue with 40 ml. petr. ether (b. 40–60°), and working up the product in the same way as described under *A* gave V (method *B*). The V (1 g.) were dissolved in 11 ml. Ac_2O and 12.5 ml. AcOH, 1.1 g. Zn dust and 0.03 ml. C_5H_5N added, the mixt. shaken until no decoloration occurred, then boiled a short time, the unreacted Zn filtered off, and washed twice with 3 ml. hot AcOH and 25 ml. H_2O; the diacetates crystd. from the filtrates in 85–90% yields and were recrystd. from MeOH (*n*, method of prepn., m.p., and m.p. of VI given): *11*, *A*, 42–3°, 67–8°; *12*, *B*, 44°, 72–3°; *14*, *B*, 52–3°, 78°; *15*, *A*, 57°, 69°; *16*, *A*, 52°, 74°. Ultraviolet spectra of the V are given. III. Analogs of α-tocoferol with unbranched sidechains. Jaroslav Weichet and Jarmila Hodrová. *Ibid.* 233–7.—Condensation of trimethylhydroquinone (I) with alkyl methylvinylcarbinols (II) described in the previous paper at higher temps. gave chromone derivs., MeC:CMe.C(OH):CMe.C:C.O.CMe·[$(CH_2)_3$Me].CH_2.CH_2 (III). The condensation was carried out either with BF_3-Et_2O-$ZnCl_2$ mixt. (method *A*), or with $AlCl_3$ (method *B*). To 60 ml. dioxane, 6 ml. BF_3-Et_2O,

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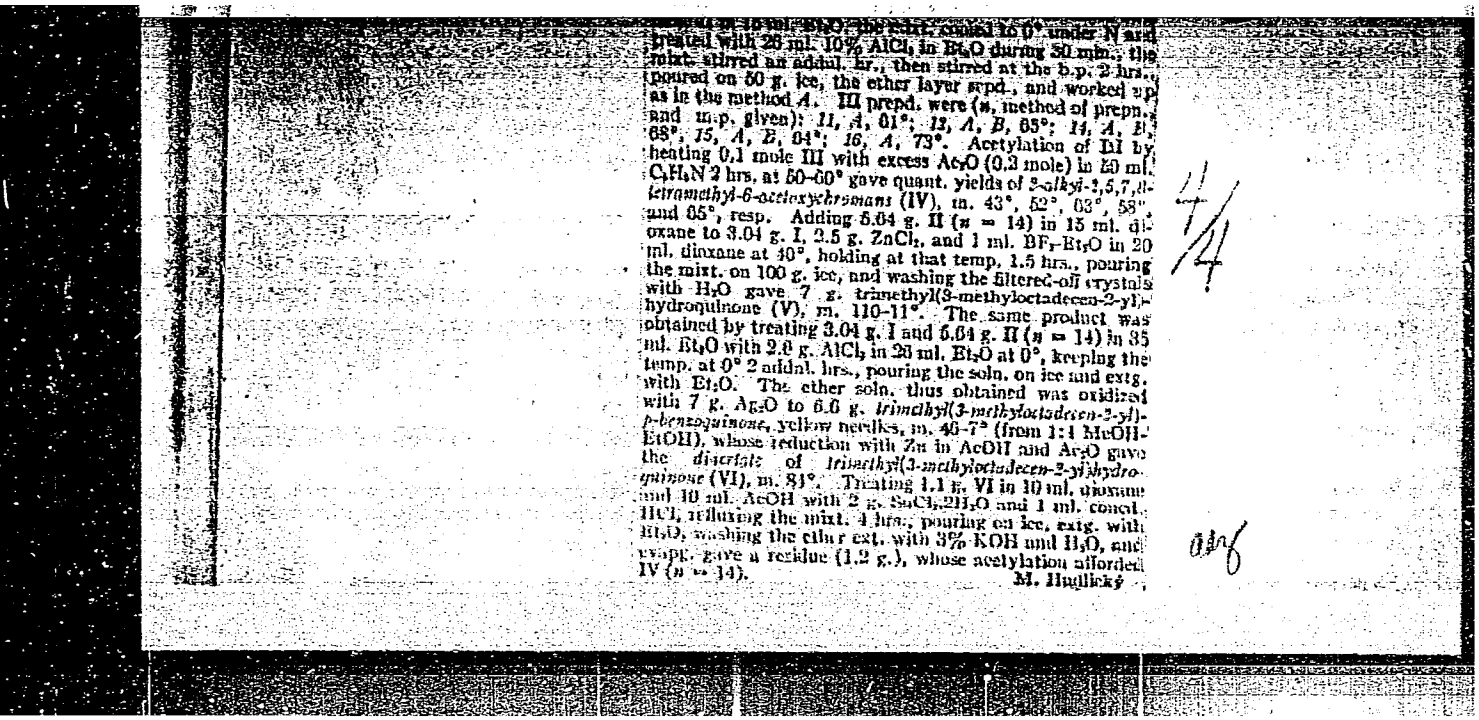


g. in 10 ml. Et_2O, the mixt. cooled to 0° under N and treated with 20 ml. 10% $AlCl_3$ in Et_2O during 30 min., the mixt. stirred an addnl. hr., then stirred at the b.p. 2 hrs., poured on 50 g. ice, the ether layer sepd., and worked up as in the method *A*. III prepd. were (*n*, method of prepn., and m.p. given): *11*, *A*, 61°; *13*, *A*, *B*, 65°; *14*, *A*, *B*, 68°; *15*, *A*, *B*, 64°; *16*, *A*, 73°. Acetylation of III by heating 0.1 mole III with excess Ac_2O (0.3 mole) in 50 ml. C_5H_5N 2 hrs. at 50–60° gave quant. yields of *2-alkyl-2,5,7,8-tetramethyl-6-acetoxychromans* (IV), m. 43°, 52°, 63°, 58°, and 65°, resp. Adding 5.04 g. II (*n* = 14) in 15 ml. dioxane to 3.04 g. I, 2.5 g. $ZnCl_2$, and 1 ml. BF_3-Et_2O in 20 ml. dioxane at 10°, holding at that temp. 1.5 hrs., pouring the mixt. on 100 g. ice, and washing the filtered-off crystals with H_2O gave 7 g. *trimethyl(3-methyloctadecen-2-yl)-hydroquinone* (V), m. 110–11°. The same product was obtained by treating 3.04 g. I and 5.04 g. II (*n* = 14) in 35 ml. Et_2O with 2.8 g. $AlCl_3$ in 20 ml. Et_2O at 0°, keeping the temp. at 0° 2 addnl. hrs., pouring the soln. on ice and extg. with Et_2O. The ether soln. thus obtained was oxidized with 7 g. Ag_2O to 6.6 g. *trimethyl(3-methyloctadecen-2-yl)-p-benzoquinone*, yellow needles, m. 46–7° (from 1:1 MeOH-EtOH), whose reduction with Zn in AcOH and Ac_2O gave the *diacetate* of *trimethyl(3-methyloctadecen-2-yl)hydroquinone* (VI), m. 81°. Treating 1.1 g. VI in 10 ml. dioxane and 10 ml. AcOH with 2 g. $SnCl_2.2H_2O$ and 1 ml. concd. HCl, refluxing the mixt. 4 hrs., pouring on ice, extg. with Et_2O, washing the ether ext. with 3% KOH and H_2O, and evapg. gave a residue (1.2 g.), whose acetylation afforded IV (*n* = 14).

M. Hudlický

KVITA, V.; KEJHA, J.

Use of polyphosphoric acid in organic synthesis. p. 164.

CHEMICKE LISTY. (Ceskoslovenska akademie ved. Chemicky ustav) Praha, Czechoslovakia, Vol. 53, no. 2, Feb. 1959.

Monthly List of East European Accessions (EEAI), LC, Vol 8, no. 11, Nov. 1959 uncl.

KVITA, V.; WEICHET, J.

Studies in vitamin K and vitamin [series. IX. Total synthesis of dihydrophytol. Coll Cz Chem 25 no.1:254-258 Ja '60. (EEAI 9:12)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.
(VITAMIN K)
(VITAMIN E)
(DIHYDROPHYTOL)

SMOLIK, S.; KVITA, V.; WEICHET, J.; TRCKA, V.

Studies in vitamin K and vitamin E series. X. Synthesis of vitamin K_1 analogue with unbranched side chain. Coll Cz Chem 25 no.1:259-264 Ja '60. (EEAI 9:12)

1. Forschungsinstitut fur Parmazie und Biochemie Prag.
(VITAMIN K) (VITAMIN E) (VITAMIN K_1)

WEICHET, J.; BLAHA, L.; KVITA, V.

Studies in the vitamin K and vitamin E series. XII. Synthesis of 2-methyl-3-difarnesol-1,4-naphthoquinone and related compounds. Coll Cz Chem 25 no.7:1914-1921 Jl '60. (EEAI 10:9)

1. Forschungsinstitut fur Pharmazie und Biochemie, Prag.

(Vitamin K) (Vitamin E) (Methyl group)
(Farnesol) (Naphthoquinone)

KVITA, V.

HACH, V.; KVITA, V.; KOLINSKY, J.; MACEK, K. CSSR

no academic degrees indicated

Drugs (Leciva), Dolni Mecholupy (for Hach, Kvita, Kolinsky). Research Institute for Pharmacy and Biochemistry, Prague (for Macek)

Prague, Collection of Czechoslovak Chemical Communications, No 1, 1963, pp 266-271

"Contribution to Bromization in the Acetophenon Series"

(4)

HACH, V; KVITA, V; KOLÍNSKÝ, J.

Czechoslovakia

Léčiva, Dolní Měcholupy, near Prague - (for all)

Prague, Collection of Czechoslovak Chemical Communications, No 4, 1963, pp 855-861

"Antimicrobe Active Derivates of p-Dichloracetamido-benzoic Acid."

3

HACH, V.; KVITA, V.; KOLINSKY, J.; MACEK, K.

Contribution to the bromination in the acetophenone series. Coll Cz Chem 28 no.1:266-271 Ja '63.

1. Leciva, Dolni Mecholupy (for Hach, Kvita and Kolinsky).
2. Forschungsinstitut fur Pharmazie un Biochemie, Prag (for Macek).

HACH, V.; KVITA, V.; KOLINSKY, J.

Active animicrobic derivatives of p-dichloracetamidobenzoic acid. Coll Cz Chem 28 no.4:855-862 Ap '63.

1. Leciva, Dolni Mechnolupy bei Prag.

HACH, V.; KVITA, V.

Data on the preparation of 2-formyl-1-methylpyridinium oxime iodine. Cesk. farm. 13 no.8:399-400 O '64.

1. Leciva n.p. Praha.

HACH, V.; KVITA, V.

Antibacterial agents. IV. Preparation of D-chloramphenicol cinnamate. Cesk. farm. 13 no.1 [illegible] '64

1. Leciva hruba n.p., Dolni Mecholupy.

CZECHOSLOVAKIA

KVITA, V.; HAC., V.; KAKAC, B.; KOLINSKY, J.

Leciva, Dolni Mecholupy and Research Institute for Pharmacy and Biochemistry - (for all).

Prague, Collection of Czechoslovak Chemical Communications, No 11, November 1965, pp 3767-3771.

"Synthesis of (±)-4-methyllobeline."

(4)

KVITAISHVILI, I.G.

Changes in the total protein and protein fractions of the blood serum in scarlet fever. Soob. AN Gruz. SSR 39 no.3: 607-611 S '65. (MIRA 18:10)

KVITASH, V. A.

SOROCHINSKIY, A.F., kandidat meditsinskikh nauk (Stavropol'); KVITASH, V.A. (Stavropol'); IGORTSEV, S.D. (Stavropol').

Discontinuous sleep and local therapy of certain skin diseases. Vest. ven. i derm. no.3:51 My-Je '54.
(SKIN--DISEASES) (SLEEP--THERAPEUTIC USE)

BOKSHTEYN, M.Ye., podpolkovnik meditsinskoy sluzhby, kand.med.nauk; KVITASH, V.A., podpolkovnik meditsinskoy sluzhby, kand.med.nauk

Clinical importance of the early stages of degenerative diseases of the spine. Voen.-med.zhur. no.12:72-75 '59. (MIRA 14:1)
(SPINE--DISEASES)

GAL'PERIN, Yu.B.; BONDARENKO, L.P.; KVITASH, V.A., kand. med. nauk.

Otogenous abscess of the temporal lobe with atypical clinical course.
Vest. otorin. 21 no.2:90-91 Mr-Ap '59. (MIRA 12:4)

1. Iz Solnechnogorskoy gorodskoy bol'nitsy (Moskovskaya oblast').
(TEMPORAL LOBE, abscess,
otogenous, atypical case (Rus))

KVITASHVILI, A.A.

Clinical aspects and diagnosis of infectious mononucleosis.
Soob. AN Gruz. SSR 38 no.1:227-232 Ap '65.
(MIRA 18:12)

KVITASHVILI, G. V.

USSR/Medicine - Scarlet fever FD-2301

Card 1/1 Pub 148 - 2/36

Author : Kvitashvili, G. V.; Elizbarashvili, L. N.; Bibineyshvili, M. V.; Zedaniya, G. M.

Title : The clinical and epidemiological characteristics of scarlet fever on the basis of data collected at a clinic of infectious diseases during 1931-1947

Periodical : Zhur. mikro. epid. i immun. No 2, 10-13, Feb 1955

Abstract : Outline the clinical and epidemiological aspects of scarlet fever in Tbilissi during 1931-47, considering infection with this disease as a single, uninterrupted epidemiological process extending over 14 years. State that the average lethality from scarlet fever during this period was 8.9% and that the causative factor of the disease became milder, i.e. produced a less severe form of the infection towards the end of the period. One graph.

Institution : Clinic of Infectious Diseases, Tbilissi Medical Institute

Submitted : August 10, 1953.

Country : USSR
Category: Virology. Bacterial Viruses (Phages)

E

Abs Jour: Ref Zhur-Biol, No 23, 1958, No 103470

Author : Kvitashvili, G.V.
Inst : -
Title : Indications for the Use of Dysentery Phage and Its Therapeutic Effectiveness

Orig Pub: Sb. Bakteriofagiya. Tbilisi, Gruzmedgiz, 1957, 269-273

Abstract: Comparative data are presented on the treatment of patients with acute dysentery with phages, antibiotics and sulfonamides. The best effect was obtained through the use of phage. The effectiveness of phage was greater in the treatment of adults than

Card : 1/2

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928320002-5"

Country : USSR
Category: Virology. Bacterial Viruses (Phages)

E

Abs Jour: Ref Zhur-Biol., No 23, 1958, No 103470

of children, and when the phage was given on the first to third day of the disease. -- Ya. I. Rautenshteyn.

Card : 2/2

KVITASHVILI, G. V.

"Indications to the use of dysentery bacteriophage and its therapeutic effectiveness."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

KVITASHVILI, G.V.

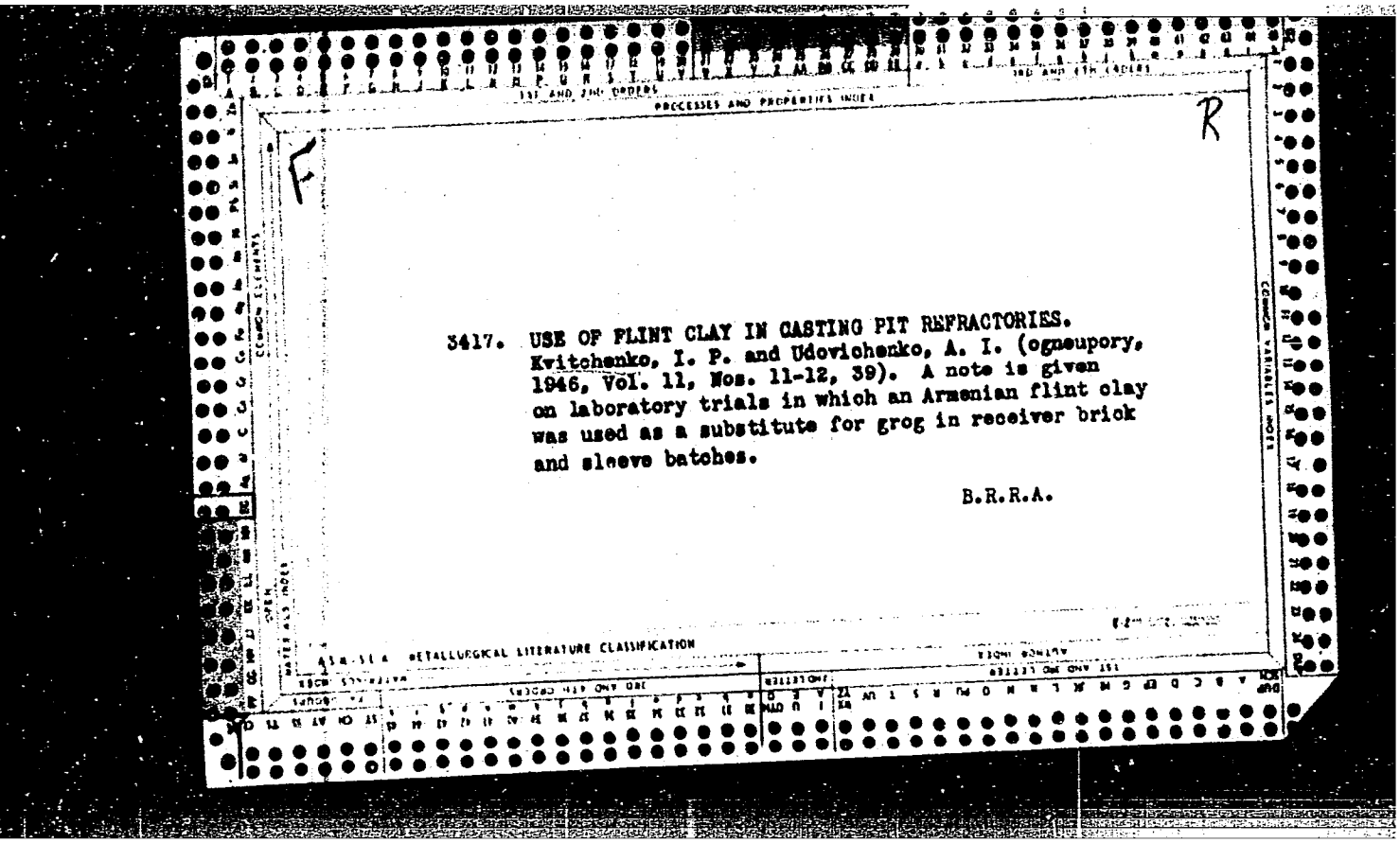
Diagnosis and treatment of chronic dysentery. Soob.AN Gruz. SSR 24 no.3:363-370 Mr '60. (MIRA 13:7)

1. Tbilisskiy gosudarstvennyy meditsinskiy institut. Predstavleno chlenom-korrespondentom Akademii nauk Gruzinskoy SSSR. I.Ya. Tatishvili.
(DYSENTRY)

KVITCHASNYY, G.I.

CHURSIN, V.M.; KVITCHASNYY, G.I.

Working experience of a mixed team in saving metal. Lit.proizv. no.6:30-31 S '54. (MLRA 7:10)
(Founding)



3417. USE OF FLINT CLAY IN CASTING PIT REFRACTORIES. Kvitchenko, I. P. and Udovichenko, A. I. (ogneupory, 1946, Vol. 11, Nos. 11-12, 39). A note is given on laboratory trials in which an Armenian flint clay was used as a substitute for grog in receiver brick and sleeve batches.

B.R.R.A.

KVITCHENKO, I. P., Engr.; BELIKOV, Ye. I.

"Work organization in the drying section of the plant 'Krasnaya Zvezda'"

Ogneupory, No. 1, 1948.

KVITCHENKO, I. P. PA 12/49T59

USSR/Engineering Sep 48
Ceramics, Firing

"Firing Ware in the 'Krasnaya Zvezda' Plant," I. P. Kvitchenko, Engr, 3 pp

"Ogneupory" Vol XIII, No 9

Describes firing routine and relative cost of each stage; with graphs and diagrams.

[redacted] 12/49T59

181T45

KVITCHENKO I. P.

USSR/Engineering - Refractories, Equipment

Mar 51

"Utilization of the Heat of Waste Gases in Periodic Kilns," I. P. Kvitchenko

"Ogneupory" No 3, pp 99-103

To decrease heat losses in waste gases of periodic kilns, constructed air heater (recuperator) to supply hot air for tunnel driers. Device is installed in smoke flues of periodic kilns. Use of waste gases eliminates operation of flame heater to supply driers with hot air, and conserves fuel. Describes constr and operation.

181T45

BCS

Fuels, Kilns, Firing Manufacturing Processes

267. Utilization of heat in flue gases from periodic kilns.—I. P. KYITCHENKO (*Ogneupory*, 16, 99, 1951). A system of recuperators that has been used with success at a Russian brickworks is described in detail. (6 figs., 2 tables.)

KVITCHENKO, I.P.

Manufacture of highly aluminous products from native, highly aluminous raw materials in the Chinese People's Republic. Ogneupory 21 no.5:234-235 '56. (MLRA 9:10)

(China--Refractory materials)

KVITCHENKO, L. P.

Increasing the productive capacity of ring kilns. L. P. Kvitchenko (Refractories Plant, Semiluksk). *Ogneupory* 22, 430-2(1957).—Scale drawings of plan and elevation of a ring kiln are shown with improved air supply and exhaust facilities that have raised the product output per cu. m. of active vol. of the kiln, by 200 kg./day. H. L. Olin

AUTHOR: Kvitchenko, I. P. 131-1-8/14

TITLE: An Attempt of Pressing Fire-Clay Beams for Glass Melting Furnaces on a 750 t Friction Press (Opyt pressovaniya shamotnykh brus'yev dlya steklovarennykh pechey na 750 t friktsionnom presse)

PERIODICAL: Ogneupory, 1958, Nr 1, pp. 35 - 39 (USSR)

ABSTRACT: The constructors of the factory together with the laborers equipped the 750 t friction press with an ejector mechanism, a movable mold, with facilities for the mechanized supply of the mass to the mold and for taking out the pressed beam (figure 1). The mass of fire-clay prepared in the pan grinder is after sifting supplied to a distributing bunker from where it is led to the mold by means of a channel. The movable mold is represented in figure 2. The ejecting mechanism is to be seen in figure 3. The scheme of the device for taking out the ready-pressed beam is recorded in figure 4. The process of the manufacture of a glass beam on the press is as follows: 1.) Before filling the press with mass its walls are smeared with a mixture of petroleum and stearin in the ratio 90:10; 2.) an extension piece guaranteeing the reception of the required quantity of mass for the given beam is mounted on the mold; 3.) the first pressing which compresses the mass to the height of

Card 1/2

An Attempt of Pressing Fire-Clay Beams for Glass Melting Furnaces on a 750 t Friction Press

extension, i.e. to 150 to 250 mm, takes place slowly. Then the extension piece is taken off and the pressing is finished with 5 - 6 blows;

4.) the first beam pressed is weighed and the quantity of mass is correspondingly corrected.

The layer for glass-beams consists of fire-clay of the clay Ч-1-85 % and of the clay Ч-1-15 %. The fire-clay granulation, optimum moisture content of the mass, and the dross density are given. The dimensions of the pressed beam are 503 x 402 x 303 mm, its weight 132 - 136 kg. It possesses exact angles and surfaces and its outward appearance is much better than that of a stamped beam. The press is operated by three workers and the attained output is 60 beams or 8 t respectively per layer. The physical-chemical characteristics of the glass beam are given in the table. There are 4 figures, and 1 table.

ASSOCIATION: Semilukskiy ogneupornyy zavod
(Semiluki Refractory Products Plant)

AVAILABLE: Library of Congress

1. Beams-Processing 2. Refractory materials

AUTHORS: Kvitchenko, I. P., Markevich, I. S. 131-23-5-3/16
Shaferman, M. Ya.

TITLE: Application of Natural Gas in the Manufacturing of Fire-Clay Products (Primeneniye prirodnogo gaza v proizvodstve shamotnykh izdeliy)

PERIODICAL: Ogneupory, 1958, Vol. 23, Nr 5, pp. 201-204 (USSR)

ABSTRACT: The thermal power of the natural gas from the Stavropol' place of discovery is 8500 kcal/ m^3. Its chemical composition in % is: CH_4 -97,8; C_2H_6 -0,5; C_3H_8 -0,3 C_4H_{10} -0,1; N_2 -1,3. The work department n. 5 of the Semiluksk works has rotary driers, air heaters for tunnel drying plants, periodic kilns for burning products and clay into fire-clay, shaft furnaces, an annular kiln and a central boiler plant. The department needs 4500 m^3 of natural gas per hour for firing the above aggregates. The pressure in the gas line for natural gas is 4-6 atmospheres excess pressure. In the heat plants with high gas consumption RD pressure regulators are used additionally. In figure 1 such a pressure regulator, built into an annular kiln, is shown. Periodic kilns and rotary driers are equipped with low-pressure torches which permit to regulate the gas

Card 1/2

Application of Natural Gas in the Manufacturing of Fire-Clay Products 131-23-5-3/16

supply from 1o to 6o m^3 / per hour (figure 2). The firings of the steam boilers as well as of the rotary driers and heaters are equipped with gas burners of the type Tsarik as can be seen from figure 3. In figure 4 the scheme of the gas supply to the chamber of an annular kiln is shown. A gas firing for a 1oo ton periodic kiln can be seen in figure 5, and in figure 6 a gas firing for a rotary drier of an output of 12-14 tons per hour is shown. Furthermore the equipment of kilns with gas burners is described in detail. In figure 7 curves of the burning of products by means of generator and natural gas in annular kilns is shown and in figure 8 the same curves by means of solid fuel and natural gas. By the change-over to natural gas the finish of the products improved and also the waste portion has been reduced to about half its value. Also the quality of fire-clay improved considerably, the same as its water-absorbing capacity. The drying period in the tunnel drying plants was reduced by 6% the same as the waste. There are 8 figures.

ASSOCIATION: Semilukskiy ogneupornyy zavod (Semiluki Works for Refractories)

AVAILABLE: Library of Congress

Card 2/2 1. Metallurgy 2. Fuels 3. Natural gas - Applications

15(2) SOV/131-59-8-5/14

AUTHORS: Kvitchenko, I. P., Markevich, I. S.

TITLE: Machine for Setting Glass Beams

PERIODICAL: Ogneupory, 1959, Nr 8, pp 350-354 (USSR)

ABSTRACT: In the Semiluki Plant a machine for setting glass beams was designed in 1955 following a suggestion by T. Ye. Trofimov, which however proved to be imperfect. At present, a second improved model has been designed, by means of which the furnace can be filled up to the vault, thus leading to an increase in the output. Figure 1 shows the appearance of such a setting machine. Its capacity amounts up to 40 t per seven-hour shift. Figure 2 gives a general view of the machine, and figure 3 illustrates the kinematic scheme of the latter; finally, it is described in detail. Its small size and high mobility are particularly pointed out. It is capable of lifting a glass beam from any position and placing it up to a height of 3 m. The machine is operated by one person. There are 3 figures.

ASSOCIATION: Semilukskiy ogneupornyy zavod (Semiluki Plant for Refractory Products)

Card 1/1

KVITCHENKO, I.P.

Manufacture of fire-clay and fire-clay carborundum pipes.
Ogneupory 26 no. 2:58-59 '61. (MIRA 14:2)

1. Semilukskiy obneupornyy zavod.
(Heat regenerators) (Fire clay)

KVITCHENKO, I.P.; SHAFERMAN, M.Ya.

Testing a periodic kiln for firing glass furnace brick by natural gas. Ogneupory 26 no. 4:166-170 '61. (MIRA 14:5)

1. Semilukskiy ogneupornyy zavod.
(Kilns)

TSVETKOV, V.N.; ANDREYEVA, L.N.; KVITCHENKO, L.N.

Flow birefringence and flexibility of deoxyribonucleic acid molecules. Vysokom. soed. 7 no.11:2001-2005 N '65.
(MIRA 19:1)

1. Institut vysokomolekulyarnykh soyedineniy AN SSSR. Submitted March 10, 1965.

KVITCHENKO, Ya.F.

Devices used for checking trailer brake valves and air -distribution valves. Avt.transp. 35 no.11:14-15 N '57. (MIRA 10:12)
(Tractors--Brakes--Testing)

BRONSHTEYN, L.A., kand.tekhn.nauk; nauchnyy sotrudnik; BILIBIN, I.V., nauchnyy sotrudnik; KVITCHENKO, Ya.P., nauchnyy sotrudnik; LEVIN, D.M., nauchnyy sotrudnik; NADEZHDIN, B.N., nauchnyy sotrudnik; NOVIKOVA, A.I., nauchnyy sotrudnik; PONIZOVKIN, A.N., nauchnyy sotrudnik; SHEYNIN, A.M., nauchnyy sotrudnik; ZUYEVA, N.K., tekhn.red.

[Operational and economic evaluation of truck-trains of various composition] Ekspluatatsionno-ekonomicheskaia otsenka avtopoezdov razlichnogo sostava. Moskva, Nauchno-tekhn.izd-vo avtotransp. lit-ry. No.1. [ZIL truck train] Avtopoezda ZIL. 1958. 58 p. (MIRA 12:12)

1. Moscow. Nauchno-issledovatel'skiy institut avtomobil'nogo transporta. 2. Nauchno-issledovatel'skiy institut avtomobil'nogo transporta (for all, except Zuyeva).

(Automobile trains)

BRONSHTEYN, L.A., kand.tekhn.nauk; KVITCHENKO, Ya.P.; NOVIKOVA, A.I.. Prinimali uchastiye: LESOV, Yu.I.; ITKIND, I.I.. MARTENS, S.L., red.; GALAKTIONOVA, Ye.N., tekhn.red.

[Operational and economic evaluation of motor-vehicle trains with diverse formation] Ekspluatatsiiono-ekonomicheskaia otsenka avtopoezdov razlichnogo sostava. Moskva, Avtotransizdat. No.2. [The GAZ-51P tractor with the PAZ-744 semitrailer] Tiagach GAZ-51P s polupritsepom PAZ-744. 1959. 41 p. (MIRA 13:3)

1. Moscow. Nauchno-issledovatel'skiy institut avtomobil'nogo transporta. 2. Sotrudniki Nauchno-issledovatel'skogo instituta avtomobil'nogo transporta (NIIAT) (for Bronshteyn, Kvitchenko, Novikova). 3. Glavnyy inzhener Upravleniya torgovogo transporta Glavmosavtotransa (for Lesov). 4. Nachal'nik otdela ekspluatatsii Mostorgtransa (for Itkind).

(Tractor trains)

ARKHIPETS, Ye.Ya. (Kiyev); BONDAROVICH, I.M. (Khar'kov); BULANOV, V.N. (Kiyev); GALUSKIN, V.B. (Kiyev); GOGOTSI, G.A. (Nikolayev); GORBUNOVA, N.N., (Kiyev); GORLITSKIY, B.A. (Kiyev); DYADYUSHA, G.G. (Kiyev); KATSNEL'SON, I.Ye. (Dnepropetrovsk); KVITCHUK, N.A. (Kiyev); KIRILLOV, I.A., (Krym) KONOPLYASOVA, N.S. (Chernovtsy); NIKOL'SKIY, V.V. (Kiyev); PONOMARENKO, A.A. (Stanislav); PESCHANSKIY, A.I. (Kiyev); POPOV, V.N. (Kiyev); PTASHNIKOVA, I.V. (Uzhgorod); STESHENKO, N.G. (Kiyev); CHAYKIN, M.M. (Vinnitsa); SHAPOSHNIKOVA, N.N. (Kiyev); SHPORTYUK, V.I. (Kiyev); YANKO, N.M. (Stalinskaya oblast'); SVECHNIKOVA, N., redaktor; SMORODSKIY, V., tekhnicheskiy redaktor

[Tourist routes through the Ukraine] Turistskie marshruty po Ukraine. Kiev, Izd-vo TsK LKSMU "Molod'," 1957. 368 p. (MIRA 10:8)
(Ukraine--Description and travel)

Z/039/60/021/02/009/037
E192/E535

AUTHOR: Kvítek, Emil, Engineer, Candidate of Technical Sciences

TITLE: Design of Linear Networks on the Basis of Noise Matrices

PERIODICAL: Slaboproudý obzor, 1960, Vol 21, No 2, pp 96-102

ABSTRACT: A four-terminal network (quadripole) can be represented by a generalized equivalent circuit. Such a circuit can contain noise sources which depend on the currents and voltages applied to it from an external device as well as independent noise sources. A linear quadripole can be described by

$$I_1 = Y_{11}U_1 + Y_{12}U_2$$
$$I_2 = Y_{21}U_1 + Y_{22}U_2 \qquad (5)$$

where I_1 and U_1 are the current and voltage at the input of the quadripole, while I_2 and U_2 are the current and voltage at the output. The parameters Y_{ij} represent the admittance elements of the quadripole.

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Design of Linear Networks on the Basis of Noise Matrices

If the quadripole contains noise sources, these can be represented by equivalent current sources i_1 and i_2 (see Fig 1). In this case the equations of the system are as follows:

$$I_1 = Y_{11}U_1 + Y_{12}U_2 + i_1,$$
$$I_2 = Y_{21}U_1 + Y_{22}U_2 + i_2. \qquad (6)$$

The currents i_1 and i_2 may not be entirely independent, in which case their correlation can be expressed by Eq (7). The matrix of the quadripole can be expressed not only in terms of the admittance parameters but by means of impedance or mixed parameters; these are indicated in Table 1. The noise sources in such cases also have to be expressed in a different manner; this is illustrated in Figs 2. The conversion of the matrix parameters, from one type of matrix to another, can be done on the basis of

Design of Linear Networks on the Basis of Noise Matrices

Table 2. The conversion of the noise sources can be effected by employing Table 3. A very convenient representation of the internal noise sources is shown in Fig 3. This can also be represented by the equivalent circuit shown in Fig 4. It is seen that the noise sources are transferred to the input of the quadripole and are represented by the equivalent noise resistances (conductances) and correlation admittances or impedances. These equivalent noise parameters are defined by

$$R_n = \frac{\overline{|u|^2}}{4k\,T_o\Delta f} \qquad g_n = \frac{\overline{|i|^2}}{4k\,T_o\Delta f} \qquad (8)$$

$$G_n = \frac{\overline{|i_n|^2}}{4k\,T_o\Delta f} \qquad r_n = \frac{\overline{|u_n|^2}}{4k\,T_o\Delta f} \qquad (9)$$

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Design of Linear Networks on the Basis of Noise Matrices

$$Y_c = \frac{\overline{iu^*}}{|u|^2}, \qquad Z_c = \frac{\overline{ui^*}}{|i|^2} \tag{10}$$

where k is the Boltzmann constant and Δf is the frequency bandwidth. The noise resistances and admittances can be expressed in terms of the equivalent parameters of the quadripole matrix. The noise figure of the quadripole can therefore be expressed in terms of the matrix parameters, the correlation impedance or admittance and the impedance of the signal source. The noise figure is given by Eqs (14). The minimum value of the noise figure is expressed by Eqs (18). The above results can be used to determine the noise parameters of a system of two quadripoles. These parameters for parallel, series and series-parallel connections of two quadripoles, both of which contain internal noise sources, are indicated in Table 4. The parameters for

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Z/039/60/021/02/009/037
E192/E535

Design of Linear Networks on the Basis of Noise Matrices

two quadripoles, of which only one is "noisy", are indicated in Table 5. The analysis is valid for the case when the quadripoles have a comparatively narrow frequency bandwidth.
There are 5 tables, 5 figures and 25 references, 6 of which are Czech, 1 Soviet, 12 German and 6 English.

ASSOCIATION: Ústav pro výzkum radiotechniky, Opočínek
(Institute for Radio Engineering Research, Opočínek)

SUBMITTED: August 15, 1959

Card 5/5

KVITEK, I.; POPOV, Yu.P.; RYABOV, Yu.V.

Ternary fission of U^{235} on resonance neutrons. IAd. fiz. 2 no.4:677-681 O '65. (MIRA 18:11)

1. Ob"yedinennyy institut yadernykh issledovaniy.

KVITELASHVILI, A.V.

Table for mixing plaster in the dental prosthesis office.
Stomatologiia 37 no.4:71 Jl-Ag '58. (MIRA 11:9)

1. Iz zuboproteznogo otdeleniya (zav. A.A. Kvitelashvili) kurortnoy polikliniki No.1 g. Sochi (dir. A.A. Korobeynikov).
(DENTAL PROSTHESIS--EQUIPMENT AND SUPPLIES)

KVITENKO, N.K., inzh.

Construction of an earth moving, self-unloading vessel. Sudostroenie 22 [i.e.23] no.10:46 O '57. (MIRA 11:2)
(Shipbuilding)

MINIOVICH, I.A. assistent, KVITINSKAYA, A.S.; starosta gruppy kursantov

Training of pharmacy organizers. Apt.delo 4 no.3:27-28 My-Je '55.

1. Iz kafedry organizatsii farmatsevticheskogo dela Kiyevskogo instituta usovershenstvovaniya vrachey.
(PHARMACY,
in Russia, train. of pharm.organizers)

KVITINSKIY, N. M. Cand Ped Sci -- (diss) "The Development of the Speech of Oral and Written Russian in the XXXXXXXXXX Fifth-Class Students of Kabarda Schools in Literature-Reading Lessons." Mos, 1957. 16 pp 20 cm. (Academy of Pedagogical Sciences RSFSR, Scientific Research Inst for Educational Methods), 100 copies, (KL, 25-57,120)

SOV/124-58-8-9051

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 8, p 106 (USSR)

AUTHORS: Kvitka, A.L., Agarev, V.A., Umanskiy, E.S.

TITLE: Using an Electrical-analog Method to Solve the Axisymmetrical Problem of the Theory of Elasticity in a Case Where Influences are Being Exerted by Centrifugal Forces and Temperature Fields (K resheniyu osesimmetrichnoy zadachi teorii uprugosti metodom elektromodelirovaniya v sluchaye deystviya tsentrobezhnykh sil i temperaturnykh poley)

PERIODICAL: Izv. Kiyevsk. politekhn. in-ta, 1956, Vol 19, pp 455-461

ABSTRACT: To solve the axisymmetrical problem of the theory of elasticity the authors propose an electrical-analog method based on an analogy existing between the differential equations which describe, respectively, the deformation of an elastic body and the distribution of the potential in the corresponding electrical analog. The method is designed to permit study of the stress distribution in an elastic body (having the form of a body of revolution) subjected to axisymmetric surface stresses and body stresses (i.e., centrifugal forces) and being unevenly heated, the latter circumstance giving rise to an axisymmetric

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Using an Electrical-analog Method (cont.)

temperature field. When only the surface stresses are operative, i.e., when the problem can be adequately described by homogeneous differential equations, the stresses present are determined as functions of the two stress functions Φ and Ω which satisfy the system of differential equations

$$\nabla_1^2 \Omega = 0, \quad \nabla_1^2 \Phi = \frac{\partial^2 \Omega}{\partial z^2}$$

wherein

$$\nabla_1^2 = \frac{\partial^2}{\partial r^2} - \frac{1}{r}\frac{\partial}{\partial r} + \frac{\partial}{\partial z^2}$$

In the general case, the expressions for the stresses contain the two functions Φ and Ω as well as special solutions for the respective inhomogeneous equations describing the influence of the centrifugal forces and the effect of the uneven heating. The differential-equation system based on the functions Φ and Ω is set up in terms of finite differences and is solved on an electric network integrator having three resistance networks which simulate the region of the elastic body under investigation. The potentials

Using an Electrical-analog Method (cont.)

encountered at the junction points of the first network correspond to the values of the function Ω, those at the junction points of the second network to the values of $\partial^2\Omega/\partial z^2$, those at the junction points of the third network to the values of the function Φ. In addition, all the interior junction points of the second network are linked through source resistances to the corresponding junction points of the third network. The boundary conditions for the functions Φ and Ω are fulfilled by the method of successive approximations. The authors include no estimate of the error inherent in their method, and they give no example of the method's application to a specific case.

A.D. Kovalenko

18(0,7) PHASE I BOOK EXPLOITATION SOV/2170

Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov

Voprosy poroshkovoy metallurgii i prochnosti materialov, VYP. 5 (Problems in Powder Metallurgy and Strength of Materials, Nr 5) Kiyev, Izd-vo AN USSR, 1958. 172p. 2,000 copies printed.

Ed. of Publishing House: Ya. A. Samokhvalov; Tech. Ed.: V.Ye. Shlyarova; Editorial Board: I.N. Frantsevich (Resp. Ed.), I.M. Fedorchenko, G.S. Pisarenko, G.V.Samsonov, and V.V. Grigor'yeva.

PURPOSE: This collection of articles is intended for a wide circle of scientists and engineers in the research and production of powder metallurgy. It may also be useful to advanced students of metallurgical institutes.

COVERAGE: This collection of articles describes the results of investigations made at the Institut metallo keramiki i spetsial'nykh splavov, AN USSR (Institute of Powder Metallurgy and Special Alloys, Academy of Sciences, Ukrainian SSR). The physical and chemical properties of materials used in powder metallurgy are discussed. Materials described as new, production processes, and methods and results of mechanical testing are described. No personalities are mentioned. References follow each article.

TABLE OF CONTENTS:

AVAILABLE: Library of Congress

Card 6/6 00/bg 9-1-59

KVITKA, A. L.

AGAREV, V.A.; UMANSKIY, E.S.; KVITKA, A.L.

Solution of the axially symmetrical temperature problem in the elasticity theory. Vop.por.met. i prochn.mat. no.5:134-159 '58. (MIRA 12:8)
(Elasticity--Electromechanical analogies)

SOV/21-58-11-4/28

AUTHORS: Umanskiy, E.S., Kvitka, A.L. and Agarev, V.A.

TITLE: A Method of Initial Functions in the Axisymmetric Problem of the Theory of Elasticity (Metod nachal'nykh funktsiy v osesimmetrichnoy zadache teorii uprugosti)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1958, Nr 11, pp 1167-1171 (USSR)

ABSTRACT: The authors present the statical and physical equations of the axisymmetic problem, expressed through the four initial functions, in two variants: the first of them is used in cases when boundary conditions on a surface r = f z) (in particular for a cyliner r = const) should be satisfied; the second variant is applied for the rigorous observance of conditions on the planes z = const. Making use of the V.Z. Vlasov [Ref 1] method, the authors give a general solution of the axisymmetric problem of the theory of elasticity with taking into consideration some inertial and temperature effects. The solution of some particular problems is reduced to the integration of ordinary differential

Card 1/2

A Method of Initial Functions in the Axisymmetric Problem of the Theory of Elasticity

equations. If one or another order of this equation is chosen, the approximate solution of the problem is obtained. This method is also extended to the problem of torsion of a solid of revolution. There are 2 Soviet references.

ASSOCIATION: Kiyevskiy politekhnicheskiy institut (Kiyev Polytechnical Institute)

PRESENTED: By Member of the AS UkrSSR, G.N. Savin

SUBMITTED: May 8, 1958

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration.

KVITKA, A. L.

Cand Tec Sci, Diss -- "Electrical simulation of the axisymmetric problem in the theory of elasticity (as applicable to investigation of the stressed state of turbomachine elements)." Kiev, 1961. 30 pp with drawings, 20 cm (Inst of Metalloceramics and Spec Alloys, Acad Sci UkrSSR), 180 copies, Not for sale (KL, No 9, 1961, p 182, No 24344), /61-54096/

PISARENKO, Georgiy Stepanovich, prof., doktor tekhn. nauk; AGAREV, Viktor Andreyevich, kand. tekhn. nauk; KVITKA, Aleksandr L'vovich, kand. tekhn. nauk; POPKOV, Viktor Grigor'yevich, kand. tekhn. nauk; UMANSKIY, Emmanuil Solomonovich, kand. tekhn. nauk; ZELENYUK, Ye.Ye., inzh., red.izd-va; [illegible], G.A., tekhn. red.

[Strength of materials] Soprotivlenie materialov. [By] G.S. Pisarenko i dr. Kiev, Gostekhizdat USSR, 1963. 790 p. (MIRA 17:2)

1. Chlen-korrespondent AN Ukr.SSR (for Pisarenko).

PISARENKO, Georgiy Stepanovich, akademik; AGAREV, Viktor Andreyevich; KVITKA, Aleksandr Lvovich; POPKOV, Viktor Grigor'yevich; UMANSKIY, Emmanuil Solomonovich; GRYAZNOV, B.A., red.

[Course on the strength of materials] Kurs soprotivleniia materialov. [By] G.S.Pisarenko i dr. Kiev, AN URSR, 1964. 467 p. (MIRA 17:10)

1. Akademiya nauk Ukr.SSR (for Pisarenko).

YARMITSKIY, Arkadiy Grigor'yevich, inzh.; KVITKA, A.L., kand. tekhn. nauk, retsenzent;

[Strength of materials] Soprotivlenie materialov. Kiev, Tekhnika, 1965. 134 p. (MIRA 19:1)

KVITKA, G. I.

KVITKA, G.I., inzhener.

New developments in pole erection. Elek. i tepl. tiaga no.3:34-36 Mr '57. (MLRA 10:6)

1. Chusovskiy uchastok energosnabzheniya Sverdlovskoy dorogi.
(Electric lines--Poles)

KVITKA, G.I., inzh.

Manually operated windlass used instead of a compound block and tackle. Elek. i tepl. tiaga 2 no.2:36 F '58. (MIRA 11:4)
(Windlasses) (Electric railroads--Wires and wiring)

KVITKA, G.P.

Quartz neogeneses of the sediments in the Tatarian stage of the Atyubinsk portion of the Ural Mountain region. Uch.zap. SGU 74: 267-270 '60. (MIRA 15:7)

(Aktyubinsk Province--Quartz)

(16,7300

SOV/21-59-10-6/26

AUTHOR: Kvitka, O.L.

TITLE: Investigation of the Stressed and Strained State of Short Thick-Walled Cylinders Subjected to Axisymmetrical Loading With the Aid of Computers in the Case of Arbitrary Radial Loading.

PERIODICAL: Dopovidi Akademiyi nauk Ukrayins'koyi RSR, 1959, Nr 10, pp 1071-1076 (USSR)

ABSTRACT: Discussing the two conventional methods [Ref. 1,2,4,5, 6,7] for solving the axisymmetrical problem in order to investigate the stressed and strained state of a short thick-walled cylinder subjected to axisymmetrical loading in the case of arbitrary radial loading, and quoting their shortcomings, the author suggests a new method to be used for this purpose. It is based on a simultaneous utilization of electric models and computers for solving the system of linear algebraic equations. The article covers a detailed description of this new method, by which the axisymmetrical problem can satisfactorily be

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SOV/21-59-10-6/26

Investigation of the Stressed and Strained State of Short Thick-Walled Cylinders Subjected to Axisymmetrical Loading With the Aid of Computers in the Case of Arbitrary Radial Loading

solved and which also permits the compiling of tables for the calculation of short thick-walled cylinders subjected to arbitrary radial loading. The method can be extended in case of action of normal loading on butts and tangential loading on cylindrical surfaces. For solving the thermo-elastic problem, an analogical method has been proposed. There are 3 graphs, 3 tables, and 6 references, 4 of which are Soviet and 2 English.

ASSOCIATION: Kyyivs'kyy politekhnichnyy instytut (Kiyev Polytechnical Institute).
PRESENTED: By H.N. Savin, Member of the AS UkrSSR
SUBMITTED: June 27, 1959

Card 2/2

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SOV/21-59-12-2/20

AUTHOR: Kvitka, O.L.

TITLE: Investigation of Stressed and Deformed State of Short Thick-Walled Cylinders in the Case of Arbitrary Axial Loading, with the Help of Computers

PERIODICAL: Dopovidi Akademiyi nauk Ukrayins'koyi RSR, 1959, Nr 12, pp 1300-1305 (USSR)

ABSTRACT: The author presents a method of solving the axisymmetric problem, which allows compiling tables for calculation of short thick-walled cylinders subjected to arbitrary axial loads as shown in Figure 1, or to the effect of a tangential loading on the surface areas. Practically, sufficiently reliable calculations can be made (as shown in Figure 2) by a formula based on the principle of superposition

$$\sigma_i = \sum \sigma_{ik} X_k \quad , \quad \varepsilon_i = \sum \varepsilon_{ik} X_k$$

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Investigation of Stressed and Deformed State of Short Thick-Walled Cylinders in the Case of Arbitrary Axial Loading, with the Help of Computers

wherein x_k is loading intensity at points k, $\tilde{\sigma}_{ik}$ and $\tilde{\varepsilon}_{ik}$ are stresses and deformations caused by the effects of a single triangular load $\tilde{X}_k = 1$ and a counterbalancing load $\tilde{\tilde{X}}_{(k)}$, for example s_k (Figure 2b), k is node index on the contour experiencing an axial load, and s is total number of contour nodes. This formula can be used, however, only in conjunction with a table of calculated stresses $\tilde{\sigma}_{ik}$ and deformations $\tilde{\varepsilon}_{ik}$, called by the author specific stresses (deformations). Explanations are given how to calculate them using the formulas (4-8) and (11), and illustrating data are presented in tables. Such tables can also be used for approximate calculation of rotation

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4

SOV/21-59-12-2/20

Investigation of Stressed and Deformed State of Short Thick-Walled Cylinders in the Case of Arbitrary Axial Loading, with the Help of Computers

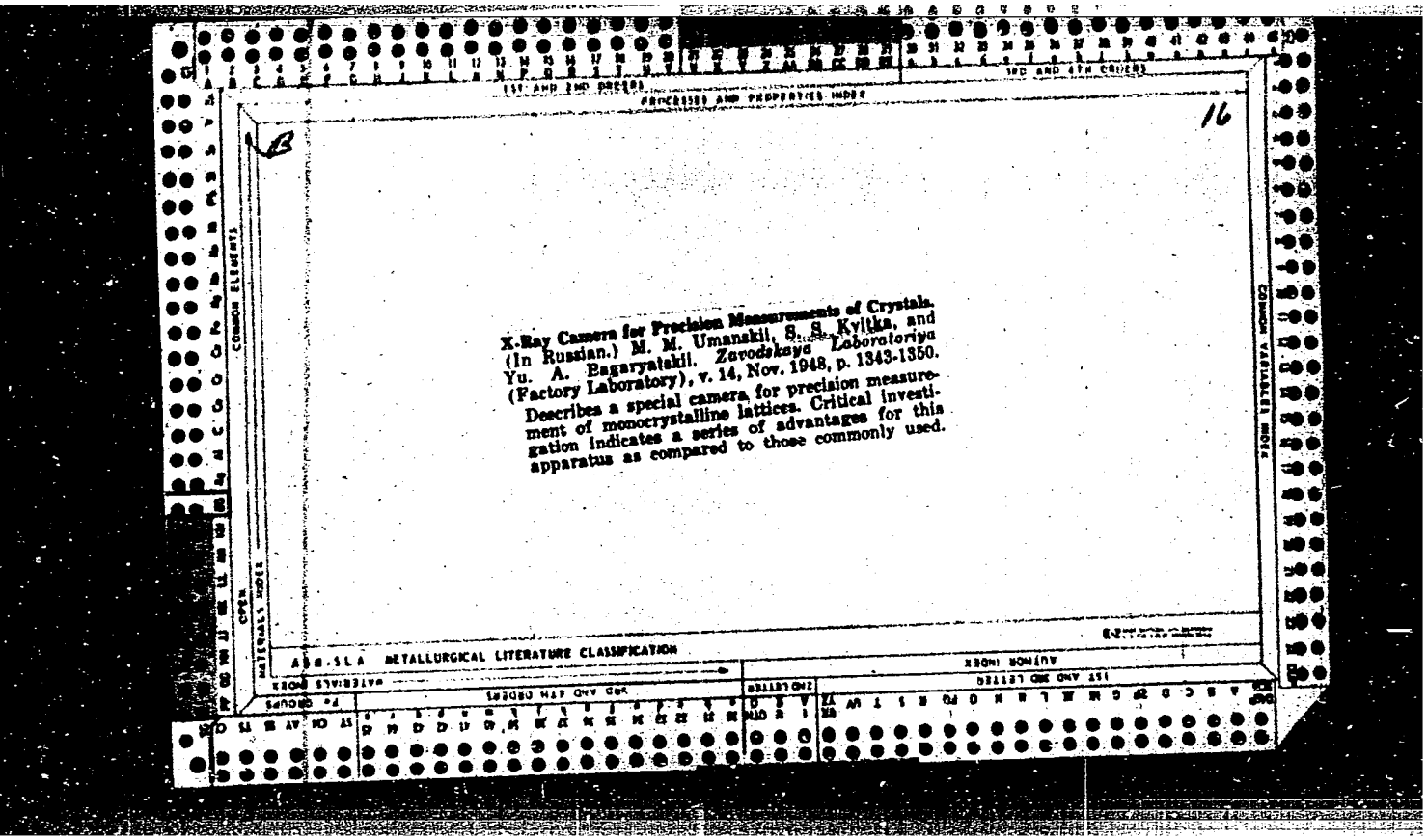
bodies having more complex form of axial cross-section, when the calculation scheme is assumed to contain several cylinders (Figure 4, for example). There are 4 tables, 3 drawings, 1 set of drawings and 6 references, 4 of which are Soviet and 2 English.

ASSOCIATION: Kyyivs'kyy politekhnichnyy instytut (Kiyev Polytechnical Institute)

PRESENTED: By H.M. Savin, Member, AS UkrSSR

SUBMITTED: June 30, 1959

Card 3/3



X-Ray Camera for Precision Measurements of Crystals. (In Russian.) M. M. Umanskii, S. S. Kyitka, and Yu. A. Bagaryatskii. *Zavodskaya Laboratoriya* (Factory Laboratory), v. 14, Nov. 1948, p. 1343-1350.

Describes a special camera for precision measurement of monocrystalline lattices. Critical investigation indicates a series of advantages for this apparatus as compared to those commonly used.

SOV/70-4-2-21/36

AUTHORS: Zubenko, V.V., Kvitka, S.S. and Umanskiy, M.M.

TITLE: The High-temperature X-ray Camera RKVT-1200 (Vysoko-temperaturnaya rentgenovskaya kamera RKVT-1200)

PERIODICAL: Kristallografiya, 1949, Vol 4, Nr 2, pp 244-247 (USSR)

ABSTRACT: A universal high-temperature camera is difficult to design and it has been found better to divide the range into 20-90°, where the whole camera is thermostatted; 20-400° where protection of the film from heat and light is not difficult and the specimen often needs no protection from the atmosphere and 400 - 1200° where a wire-wound furnace with a simple electrical thermostat can be used. The 20-400° type has been already described: RKVT-400 in the work of Zubenko and Umanskiy (Ref 2).

The RKVT-1200 camera is suitable for examining polycrystalline materials up to 1 200 °C. The specimen is oscillated or rotated and lines from $\theta = 6$ to 84° are recorded on film in a semi-cylindrical cassette. A vacuum of better than 10^{-3} mm Hg can be maintained in

Card1/3

the furnace. The body of the camera is water-cooled. The rotor and gearing of the electric motor drive are inside the vacuum but the stator is outside. The shaft for turning the specimen centering screws enters the camera by a rubber cuff. The film cassette is kinematically clamped. Knife edges cast shadows on the film at standard θ angles. A thermocouple valve LT-2 (Pirani gauge) is built into the camera for vacuum measurement and lies on the opposite side of the working space to the pump. It takes 1.5 - 2 hours to reach working temperature and vacuum. Thermal transformations ($\alpha \rightarrow \gamma$ Fe) and the thermal expansion of CeB_6 have been studied. The latter material has an expansion coefficient of $7.9 \pm 0.4 \times 10^{-6}/^{\circ}C$. The CeB_6 was enclosed in a quartz capillary with walls of thickness 0.02 mm. Exposures took 6 - 10 hours.
There are 4 figures and 4 Soviet references.

SOV/70-4-2-21/36

The High-temperature X-ray Camera RKVT-1200

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova (Moscow State University imeni M.V. Lomonosov)

SUBMITTED: August 22, 1958

Card 3/3

KVITKA. S. S. PA 163T85

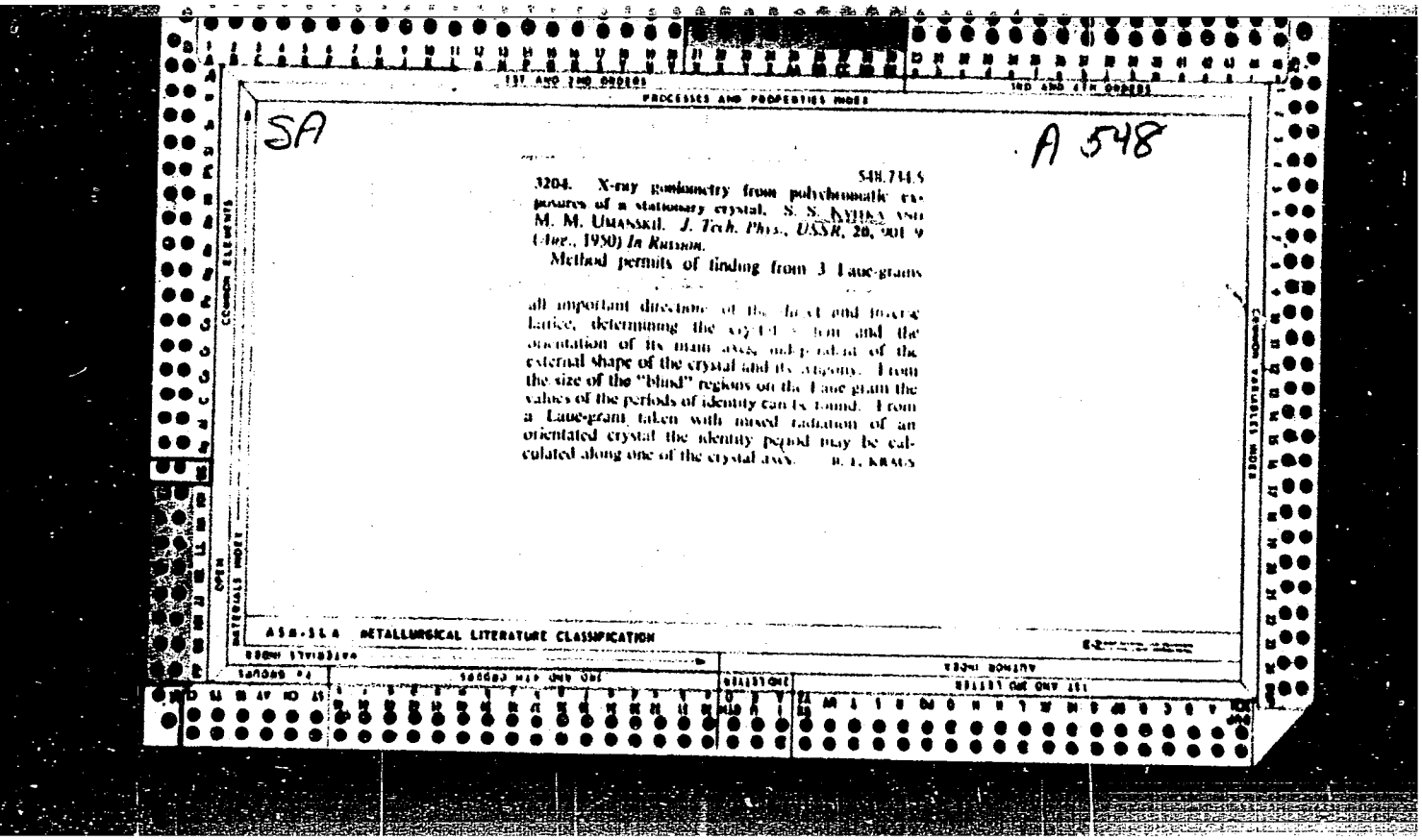
USSR/Physics - X-Ray Analysis Jun 50
X-Ray Cameras

"X-Ray Methods of Adjusting Crystals," S. S. Kvitka, Yu. N. Sokurskiy, M. M. Umanskiy, Moscow State U

"Zavod Lab" Vol XVI, No 6, pp 696-705

Describes X-ray methods for adjusting crystals of any syngony by X-ray photographs of oscillations or Lave patterns. Suggests more expedient construction of film holder and goniometric head for X-ray camera.

163T85



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3204. X-ray goniometry from polychromatic exposures of a stationary crystal. S. S. [illegible] and M. M. Umanskii. *J. Tech. Phys., USSR*, 20, 901–9 (Dec., 1950) *In Russian.*

Method permits of finding from 3 Laue-grams all important directions of the direct and reverse lattice, determining the crystal form and the orientation of its main axes and period of the external shape of the crystal and its symmetry. From the size of the "blind" regions on the Laue gram the values of the periods of identity can be found. From a Laue-gram taken with mixed radiation of an orientated crystal the identity period may be calculated along one of the crystal axes. B. I. KRASS

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

KVITKA, S. S.

PA 187T86

USSR/Physics - X-ray Analysis of Materials Mar/Apr 51

"X-ray Analysis of Facetless Crystals," M. M. Umanskiy, S. S. Kvitka, Sci Res Inst of Phys, Moscow State U imeni Lomonosov

"Iz Ak Nauk SSSR, Ser Fiz" Vol XV, No 2, pp 147-156

For subject analysis, stereographic projection of direct and inverse crystal lattice is used. This projection is obtained from 3 polychromatic Laue-grams. Results tabulated. Submitted at 3d All-Union Conference on Use of X-rays in Study of Materials held 19-24 Jun 50 in Leningrad. LC

187T86

KVITKA, S. S.

PA 187T96

USSR/Physics - X-ray Photography Mar/Apr 51

"X-ray Camera for Rapid Photography of Polycrystals," S. S. Kvitka, M. M. Umanskiy, Phys Faculty, Moscow State U imeni Lomonosov

"Iz Ak Nauk SSSR, Ser Fiz" Vol XV, No 2, pp 271-276

Describes camera for rapid photography of polycrystals. It operates on any type of tube and on std tubes BSV. Gives formulas and graphs for computing the angles of sample positions. Submitted at 3d All-Union Conference on Use of X-rays in Study of Materials held 19 - 24 Jun 50 in Leningrad.

LC

187T96

USSR/Physics - Monochromatic X-ray Sources May/Jun 52

"Camera-Monochromator for Photographing Polycrystals (KMSP)," S. S. Kvitka, Ye. V. Kolontsova, M. M. Umanskiy, Sci Res Inst of Phys, Moscow State U imeni Lomonosov

"Iz Ak Nauk SSSR, Ser Fiz" Vol 16, No 3, pp 372-385

232T108

Report heard at the conference on powerful monochromatic x-ray sources, held at Khar'kov 24-26 Jan 52. The purpose of the present work was to create a device, a camera-chromator, intended for x-ray

232M108

KVITKA, S. S.

photographing of polycrystallic samples in comparatively soft radiation (Cu, Ni, Co, Fe), in which a bent monocrystal is employed in the camera for monochromatizing the radiation and use is made of the methods of focusing x-ray reflections. Describe selection of the crystal and its parameters and peculiarities of photographing in vacuo.

232M108

KVITKA, S. S.

USSR/Solid State Physics - Structural Crystallography, E-3

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34616

Author: Umanskiy, M. M., Kvitka, S. S.

Institution: None

Title: Certain Method Problems in X-Ray Crystallography

Original Periodical: Trudy in-ta kristallogr. AN SSSR, 1954, 168-176

Abstract: None

1 of 1

KVITKA, S.S.

Monochromator with plate crystals in BSV-4 tubes. Kristallografiia 1 no.4:485-487 '56. (MLRA 10:1)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova.
(Monochromators)

Kvitka, S.S.

AUTHORS: Kvitka, S.S. amd Umanskiy, M.M. 70-5-27/31

TITLE: An X-ray Camera PKM-114 for the Precision Measurement of the Elementary Cell Parameters of Single Crystals (Rentgenovskaya kamera dlya pretsizionnykh izmereniy parametrov elementarnoy yacheyki na monokristallakh RKM-114)

PERIODICAL: Kristallografiya, 1957, Vol.2, No.5, pp. 702 - 704 (USSR)

ABSTRACT: A new X-ray diffraction camera with a film diameter of 11.459 cm has been constructed to use 35 mm X-ray film and to accommodate the standard Russian goniometer heads (types 2 and 2b) which are used for single crystal work. Provision for oscillating the crystal over present ranges is made. The camera is mounted with the axis of rotation horizontal and can be used on the YPC-70 X-ray tube. The general design of the X-ray optical system seems similar to that of the North American Philips 11.5 powder camera. (Assembly drawings reproduced). There are 2 figures and 2 Slavic references.

ASSOCIATION: Moscow State University im. M. V. Lomonosov (Moskovskiy Gosudarstvennyy Universitet im. M. V. Lomonosova)

SUBMITTED: September 13, 1956.

AVAILABLE: Library of Congress

Card 1/1

AUTHOR: Kvitka, S.S. SOV/70-3-4-25/26

TITLE: The Determination of the Orientation of Single Crystals from Lauegrams (Opredeleniye orientirovki monokristallov po Lauegrammam)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 4, pp 519-520 (USSR)

ABSTRACT: For finding the orientation of a single crystal fragment, Kvitka and Umanskiy (Ref 1) described a method using three Lauegrams. Zaslavskiy later suggested one Lauegram on a cylindrical film and Frank-Kamenetskiy (previous paper) proposed a method needing only one Lauegram on a flat plate. Methods using one photograph are characterised by inaccuracies and the reasons for the recommendation of Kvitka and Umanskiy are repeated. Advice on plotting Lauegrams from cylindrical films is given.

Card 1/2

SOV/70-3-4-25/26

The Determination of the Orientation of Single Crystals from Lauegrams

There are 1 figure and 3 Soviet references

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova (Moscow State University imeni M.V. Lomonosov)

SUBMITTED: March 14, 1958

Card 2/2

SOV/70-3-5-20/24

AUTHORS: Gerasimova, E.A. and Kvitka, S.S.

TITLE: The Method of Rotating a Harker Section (Metod povorota secheniy Kharkera)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 5, pp 629-631 (USSR)

ABSTRACT: A maximum, in a Patterson or Harker distribution of inter-atomic vectors, which corresponds to a vector between two symmetry-related equivalent atoms, is called a proper vector. Other maxima are called improper. In suitable cases, all atoms give proper maxima in a certain section (plane or line); these are called Harker sections and are potentially powerful for solving the structure but are, in fact, always obscured and made indecipherable by the presence of many improper peaks. In certain cases, different sections may contain the same information in equivalent distributions of proper peaks but may not have the same distribution of improper peaks. Superposition may then enable a separation to be made. If the crystal has a 4 or 6 fold screw axis, then this method of rotating the Harker section can be applied. If there is a 4_1 axis then the proper maxima in the plane $z = 1/4$ form a projection of the structure in the plane xy0

Cardl/3

rotated 45 and enlarged by $2^{1/2}$. The proper peaks in $z = 1/2$ form a picture of the projection on xy0 enlarged twice. These two diagrams can be superposed. For a 6_1 axis, there are three superposable planes, at 1/6, 1/3, 1/2. For 4_2 the sections are at $z = 0$, 1/2 and for 6_2, $z = 0$, 1/3. The method was applied to the structure of AlB_{12} having the space group $D_4^4 = P4_12_1$. A superposition was made of the Harker sections: one asymmetric part of the section at $z = 1/4$ and two asymmetric parts of the section at $z = 1/2$. Several coinciding pairs of maxima were found. Using additionally peak height considerations, the two peaks corresponding to octets of Al atoms were located.
There are 1 figure, 1 table and 3 references, 2 of which are Soviet and 1 English.

SOV/70-3-5-20/24

The Method of Rotating a Harker Section

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova
(Moscow State University imeni M.V. Lomonosov)

SUBMITTED: July 11, 1958

Card 3/3

S/070/62/007/002/008/022
E132/E160

24,2200

AUTHORS: Belov, K.P., Zaytseva, M.A., Kadomtseva, A.M., Kvitka, S.S., and Ovchinnikova, T.L.

TITLE: The magnetic properties and structures of certain garnet systems

PERIODICAL: Kristallografiya, v.7, no.2, 1962, 242-246

TEXT: Garnet structures have been synthesized by the substitution in yttrium iron garnets of Fe and Y ions by Mn, Ge and Ti and their structures and magnetic properties have been studied. In the garnet of composition $Mn_{0.5}Y_{2.5}Fe_{4.5}Ge_{0.5}O_{12}$ an anomalous temperature dependence of the spontaneous magnetisation has been observed at low temperatures (of Neel's type M). It is established that the garnet of composition $MnY_2Fe_4GeO_{12}$ has a Curie point below 0 °C and that the curve of the temperature dependence of the spontaneous magnetisation tends asymptotically to zero. The curves are explained qualitatively. The cell size of the first-mentioned compound is 12.367 Å, and

The magnetic properties and structures..

that of the second 12.347 as compared with 12.387 for the pure Y Fe garnet. In garnet there are three magnetic sub-lattices and on Neel's model M the curve observed for the first composition can be satisfactorily explained if the lattice having a weak inherent exchange interaction takes a different course from that of the other (iron) sublattices. The Ti-containing garnets $Mn_{0.5}Y_{2.5}Fe_{4.5}Ti_{0.5}O_{12}$ and $MnY_2Fe_4TiO_{12}$ were examined but showed no anomalies except that the second compound had a "tail" of residual magnetisation which persisted above the Curie point (506 °C) apparently connected with the appearance of another phase (traces of $Y_2Ti_2O_7$ were observed in the X-ray powder photograph).

There are 4 figures.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova
(Moscow State University imeni M.V. Lomonosov)

SUBMITTED: June 27, 1961

Card 2/2

KVITKA, V.

84-58-2-23/46

AUTHOR: Razumov, I., Candidate of Technical Sciences, and Kvitka, V., Gubkina, G., Engineers

TITLE: Noise Characteristics of the Tu-104 Airliner (Kharakteristiki shuma, sozdavayemogo samoletom Tu-104)

PERIODICAL: Grazhdanskaya aviatsiya, 1958, Nr 2, pp 19-21 (USSR)

ABSTRACT: The article is a report on the results of noise level tests carried out in the State Scientific Research Institute with the Tu-104 jet and the Il-14 conventional airliners. The results of tests are compared with each other and with those of the French Caravelle jet aircraft. The conclusion is that the Tu-104, flying at 375 m. altitude and rated engine speed creates a noise level at a listening station placed 4,500 m. from the take-off point equal to that of the Il-14 plane passing at an altitude of 200 m. The noise level of the Tu-104

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84-58-2-23/46

Noise Characteristics of the Tu-104 Airliner

is of the same order as that of the Caravelle and other foreign jet aircraft. Three diagrams and two tables accompany the text.

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Card 2/2 1. Airplane noise-Test results 2. TU-104(Airplane)-USSR 3. Il-14(Airplane)-USSR