

CHUYKOVA, V.G.

Two upper Paleozoic granite complexes in the northeastern part
of the Balkhash region. Sov. geol. no.62:151-153 '57. (MIRA 11:6)

1.Vsesoyuznyy aerogeologicheskiy trest.
(Balkhash region--Granite)

CHUYKOVA, V. G.

Dikes of Hercynian intrusions in the Tarbagatay Range. Biul.
MOIP. Otd. geol. 34 no.6:138-139 N-D '59. (MIRA 14:3)
(Tarbagatay Range—Dikes(Geology))

ABDULKABIROVA, M.A.; ALEKSANDROVA, M.I.; AFONICHEV, N.A.; BANDALETOV, S.M.; BESPALOV, V.F.; BOGDANOV, A.A.; BOROVNIKOV, L.I.; BORSUK, B.I.; BORUKAYEV, R.A.; BUVALKIN, A.K.; BYKOVA, M.S.; DVORTSOVA, K.I.; DEMBO, T.M.; ZHUKOV, M.A.; ZVONTSOV, V.S.; IVSHIN, N.K.; KOPYATKEVICH, R.A.; KOSTENKO, N.N.; KUMPAN, A.S.; KURDYUKOV, K.V.; LAVROV, V.V.; LYAPICHEV, G.F.; MAZURKEVICH, M.V.; MIKHAYLOV, A.Ye.; MIKHAYLOV, N.P.; MYCHNIK, M.B.; NIDLENKO, Ye.N.; NIKITIN, I.F.; NIKIFOROVA, K.V.; NIKOLAYEV, N.I.; PUPYSHEV, N.A.; RASKATOV, G.I.; RENGARTEN, P.A.; SAVICHEVA, A.Ye.; SALIN, B.A.; SEVRYUGIN, N.A.; SEMENOV, A.I.; CHERNYAKHOVSKIY, A.G.; CHUYKOVA, V.G.; SHLYGIN, Ye.D.; SHUL'GA, V.M.; EL'GER, E.S.; YAGOVKIN, V.I.; NALIVKIN, D.V., akademik, red.; PERMINOV, S.V., red.; MAKHUSHIN, V.A., tekhn.red.

[Geological structure of central and southern Kazakhstan]
Geologicheskoe stroenie TSentral'nogo i IUzhnogo Kazakhstana.
Leningrad, Otdel nauchno-tekn.informatsii, 1961. 496 p.
(Leningrad. Vsesoiuznyi geologicheskii institut. Materialy, no.41)
(MIRA 14:7)

" (Kazakhstan--Geology)

CHUYNYSIN, M.

District life in pictures. Sov.foto 22 no.6:25 Je '62.

(MIRA 15:6)

1. Otvetstvennyy sekretar' redaktsii gazet, "Verkhovina".
(Ukraine--Journalism, Pictorial)

CHUYSTOV, Vladimir Mikhaylovich, kand. ekon. nauk, starshiy nauchnyy
sotr.; CHAYEVSKAYA, N.S.[Chayevs'ka, N.S.], red.; GAVRILETS', D.V.
[Havrylets', D.V.], tekhn. red.

[Organization of management in a socialist industrial enterprise]
Iak organizovano upravlinnia sotsialistichnym promyslovym pid-
pryemstvom. Kyiv, Derzh. vyd-vo polit. lit-ry URSR, 1961. 44 P.
(MIRA 14:10)

1. Institut ekonomiki AN URSR (for Chuistov).
(Industrial organization)

L 09509-67 EWT(m)/EWP(t)/ETI IJP(c) JD/JG

ACC NR

AT6023740

(1, N)

SOURCE CODE: UR/2755/66/000/005/0105/0110

AUTHOR: Tsvetayov, A. A.; Chuzhko, R. K.; Bovenko, V. N.; Golovanov, Yu. N.

ORG: none

TITLE: Change in hardness during isochronous and isothermal annealing of deformed uranium of varying purity

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Metallurgiya i metallovedeniye chistykh metallov, no. 5, 1966, 105-110

TOPIC TAGS: annealing, metal deformation, uranium metal, stress relaxation, activation energy

ABSTRACT: The purpose of the work was to study the recovery of hardness during the isochronous annealing of uranium of varying purity after deformation, and to determine the activation energy of the stress relaxation process. A table shows the chemical composition of the starting uranium alloys and their content of iron, aluminum, silicon, and carbon impurities. The samples were prepared by pressing rods with a diameter of 8 mm. The rods were cut into cylinders 6 mm high. After twofold phase recrystallization, the samples were annealed for 6 hours at 600°C, and then deformed in a press at 0°C with a reduction of 50%. After annealing, the samples were subjected to isochronous ($\Delta T = 30$ min) and isothermal anneals. The hardness after

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ACC NR: AT6023740

annealing was determined with a Vickers hardness meter, according to data from 8-10 measurements. The detailed results of the tests are exhibited in a series of curves. It was concluded that the maximum observed on the curve of the isochronous hardness recovery is due to processes of deformation ageing. The recovery of hardness at $t > 300^{\circ}\text{C}$ is due to processes of autodiffusion, in the presence of internal stresses. A determination was made of the activation energy of autodiffusion for alpha uranium; the value found was 45,000 cal/mole. Orig. art. has: 6 formulas, 3 figures and 2 tables.

SUB CODE: 11, 20/ SUBM DATE: none/ ORIG REF: 006/ OTH REF: 005

Card 2/2 LC

(6)

• CZECHOSLOVAKIA/EAST GERMANY

HERINGOVA, A., KOLDOVSKY, O., NOACK, R., SCHENK, G., JIRSOVA, V.,
BRANA, H., CHYTIL, E., FRIDRICH, M., Institute for Care of
Mother and Child, Physiological Institute, Microbiological
Institute, Czechoslovak Academy of Sciences (Ustav pro Peci o Matku
a Dite, Fysiologicky Ustav, Mikrobiologicky Ustav CSAV) Prague;
Nutrition Institute (Institute fur Ernahrung) Rehbrucke.

"Activity of Beta-Galactosidase of Jejunum Homogenate and Isolated
Fractions of Microparticles in 14 Day Old Rats."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, pp 89-90

Abstract: The jejunum homogenate has maximum activity at pH 3.5,
the microparticle fraction at pH 5.5. It appears that two
beta-galactosidases are present in the jejunum. The two show
different affinity for various substrates. 1 Figure, 4 Western,
1 Czech reference. Submitted at "16 Days of Physiology" at
Kosice, 29 Sep 65.

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CZECHOSLOVAKIA

HOSKOVA, J., ~~KOLDOVSKY, O.~~, HERINGOVA, A., JIRSOVA, V., CHYTIL, F:
Physiological Institute, Czechoslovak Academy of Sciences,
Institute of Care for Mother and Child, and Microbiological
Institute, Czechoslovak Academy of Sciences (Fysiologicky Ustav
CSAV, Ustav pro Peci o Matku a Dite a Microbiologicky Ustav CSAV)
Prague.

"Activity of Beta-Galactosidase in Jejunum and Ileum of Guinea
Pigs, Mice and Rabbits in Postnatal Development."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 90

Abstract: The optimum activity in mice is at pH 3.5, guinea pigs
and rabbits have two optimums, one at pH 3.5, the other at 5.5.
Changes in the activity due to the age of the animals are des-
cribed. 1 Western, 2 Czech references. Submitted at "16 Days
of Physiology" at Kosice, 30 Sep 65.

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CZECHOSLOVAKIA

HLAVATY, V., BENDOVA, L., BLEKTA, M., BENDL, J., VALNICEK, S.,
TRNKOVA, M., CHYTIL, M. Biophysical Institute, Faculty of General
Medicine, Charles University, 2nd. Gynecological Clinic, Faculty
of General Medicine, Charles University; State Institute for Drug
Control; 2nd. Internal Clinic, Faculty of Gen. Medicine, Charles
University (Biofysikalni Ustav Fak. Vseob. Lek. KU; II. Porodnicko
Gynekologicka Klinika Fak. Vseob. Lek. KU; Statni Ustav pro
Kontrolu Leciv; II. Interni Klinika Fak. Vseob. Lek KU) Prague.

"Changes in the Volume of Circulating Blood During Physiological
Pregnancy and in Late Gestosis."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, pp 93-94

Abstract: The amount of circulating blood and plasma starts
increasing in the 9th. week of pregnancy and reaches a maximum
in the 2nd. trimester; at the end of pregnancy the volume of
plasma decreases. In late gestosis the volume of circulating
blood and plasma begin to decrease as early as the 2nd trimester.
No references. Submitted at "16 Days of Physiology" at Kosice,
27 Sep 65.

BELOMAR, O.D.; ZAYCHENKO, V.Yu.; KIRICHENKO, N.M.; CHUYUN, A.B.

Results of sampling in neutron-neutron logging in the coal deposits
of the Donets Basin. Dop. AN URSR no.5:602-606 '63. (MIRA 17:9)

1. Institut mineral'nykh resursov AN UkrSSR. Predstavleno akademikom
AN UkrSSR S.I. Subbotinym.

CHUZH, O.I.; KAPLUN, Ye.A.

Modernization of AT-175 Sh looms. Izh.prom. no.2:56-67 Ap-Je '65.
(MIRA 18:10)

CHUZH, Ye.I.; PODOROZHNYI, P.F.

~~www.mira.com.ua/ua/ukr/~~
Aggregate method of repairing combing machines used in woolen production. Tekst.prom. 14 no.6:49 Je '54. (MLRA 7:7)

1. Zamestitel' glavnogo mekhanika Voroshilovgradskoy sukonnoy fabriki im. Voroshilova (for Chush) 2. Zaveduyushchiy apparatno-pryadil'nym proizvodstvom (for Podorozhnyy)
(Carding machines---Maintenance and repair)

CHUZH, Ye.I.

Use of instruments with isotopes in the dyeing processes.
Tekst. prom. 25 no.8:60-61 Ag '65. (MIRA 18:9)

1. Nachal'nik tekhnicheskogo otdela Luganskogo tonkosukonnogo kombinata.

CHUZH, Ye.I.; DOMOROSLOV, S.P.

Scouring of wool and blended fabrics under tension. Tekst.prom.
21 no.9:55-56 S '61. (MIRA 14:10)

1. Zaveduyushchiy krasil'no-otdelochnym proizvodstvom Luganskogo
tonkosukonnogo kombinata (for Chuzh). 2. Starshiy master-tekhnolog
Luganskogo tonkosukonnogo kombinata (for Domoroslov).
(Woolen and worsted manufacture)

CHUZH, Ye.I.; KAPLUN, M.A., inzh.

Continuous line for the cleaning of fabrics in loom state.
Tekst.prom. 25 no.2:84-85 F '65. (MIRA 18:4)

1. Nachal'nik tekhnicheskogo otдела Luganskogo tonkosukonnogo kombinata (for Chuzh). 2. Tekhnicheskii otdel Luganskogo tonkosukonnogo kombinata (for Kaplun).

AL'TOVA, O.; MAYOROVA, V., tkachikha; PUTINTSEVA, Ye., uchetchitsa;
VORONINA, A., tkachikha; BOROVKOVA, A., tkachikha; VOROB'YEVA, A.;
KASPERSKAYA, N.; PEREPIETCHIKOVA, V.; CHUZHAKHINA, L., tkachikha;
KULIKOVA, M., tkachikha

That's better. Rabotnitsa. 40 no.6:21 Je '62. (MIRA 16:3)

1. Predsedatel' fabrichnogo komiteta Gorsko-Pavlovskoy fabriki imeni Kaminskogo, Ivanovskaya oblast' (for Al'tova). 2. Gorbunovskaya tkatskaya fabrika Moskovskogo oblastnogo soveta narodnogo khozyaystva (for Mayorova, Putintseva, Voronina, Borovkova). 3. Direktor Noginskoy lentotkatskoy fabriki "Krasnaya lenta" (for Vorob'yeva). 4. Predsedatel' fabrichnogo komiteta Noginskoy lentotkatskoy fabriki "Krasnaya lenta" (for Kasperskaya). 5. Nachal'nik otдела truda Noginskoy lentotkatskoy fabriki "Krasnaya lenta" (for Pereplechikov). 6. Noginskaya lentotkatskaya fabrika "Krasnaya lenta" (for Chuzhakhina, Kulikova).

(Textile industry)

CHUZH, Ye.I.; DOMOROSLOV, S.P.

Application of ultrasonic waves in fabric dyeing. Tekst.prom. 22
no.2:54 F '62. (MIRA 15:3)

1. Zaveduyushchiy krasil'no-otdelochnym proizvodstvom
Luganskogo tonkosukonnogo kombinata (for Chuzh). 2. Starshiy
master Luganskogo tonkosukonnogo kombinata (for Domoroslov).
(Dyes and dyeing--Wool) (Ultrasonic waves--Industrial
application)

CHUZHAKINA, Ye.S.

Breeding cycle of sperm whales. Trudy Inst.ocean. no.18:95-99 '55.
(Whales) (MIRA 8:12)

CHUZHAKINA, Ye.S.

Morphological characteristics of ovaries in female sperm whales
(Physeter catodon L., 1758) with reference to age determination.
Trudy Inst. morf. zhiv. no.34:33-53 '61. (MIRA 14:11)
(Whales)
(Ovaries)

ALTUNIN, Stepan Titovich, laureat Gosudarstvennoy premii doktor
tekhnicheskikh nauk, prof.; YELIZAVETSKAYA, G.V., red.;
CHUZNEV, A.I., red.

[Water-collecting complexes and reservoirs] Vodozabornye
uzly i vodokhranilishcha. Moskva, Koles, 1964. 430 p.
(MIRA 17:10)

1. Chien-korrespondent AN UzbekSSR (for Altunin).

CHUZHNIK, G.Ya.; SIDOROVA, D.F.

Effect of acridine orange on nodule bacteria, Uch.zap.Len.un.
no. 216:211-217 '56. (MLRA 10:3)
(ACRIDINE ORANGE) (MICRO-ORGANISMS, NITROGEN-FIXING)

CHUZHNIKOV, N.V., veterinarnyy vrach.

~~CHUZHNIKOV, N.V.~~ Susceptibility of horses to foot-and-mouth disease. Veterinariia
30 no.7:53 Jy '53. (MLRA 6:7)

CHUZHIKOVA, Z.A.

Publ.: November 1, 1955

rec.: December 10, 1955

reviewed: January 4, 1956

transl.i.E.: January 10, 1956

602

Dokl. Akad. Nauk 102, 57-60 (1955)

The dependence of the output of the gamma and the
photo luminescence of the crystals NaJ-Tl upon the
concentration of thallium. (Russian)

by L.M. BELJAEV, M.D. GALANIN, Z.L. MORGENŠTERN,
Z.A. ČUŽIKOVA.

(over)

L. M. BELAEV, et al.

1) The results obtained here for NaJ - Tl are compared with the results obtained for KJ - Tl crystals (L.M. BELAEV et al., Dokl. Akad. Nauk. 99, 691 (1954)); the breeding of the NaJ - Tl crystals is described. The true, polarographically determined concentration of Tl in the crystals amounted to $\sim 6 \cdot 10^{-6}$ to $1,7 \cdot 10^{-3}$ g Tl/g NaJ. 2) At Tl concentrations from $4 \cdot 10^{-5}$ to $2 \cdot 10^{-4}$ g Tl/g NaJ the coefficient of absorption in the maximum of the first (long-wave) band is proportional with the concentration C. Therefore it is possible at $C < 4 \cdot 10^{-5}$ to determine the Tl concentration from this coefficient of absorption; corresponding results are carried out. 3) At excitation in the first absorption band (289 mμ) of the activator

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L.M. Beljaev, etc.

at NaJ - Tl and KJ - Tl the luminescence output does not depend on the concentration of Tl, but increases at the second absorption band (254 mμ) with increasing concentration up to $\sim 1.5 \cdot 10^4$ mol Tl/mol NaJ, and then is independent from the concentration. At the concentrations investigated (up to $1.23 \cdot 10^3$ mol Tl/mol NaJ) there exists no quenching caused by the concentration. 4) At the investigation of the dependence of the relative output of the gamma luminescence upon the concentration of the activator at excitation by gamma rays of the Co⁶⁰ the following measurements were made (on the methods of the measurements, see L.M. BELJAEV et al., Dokl. Akad. Nauk 92, 691 (1954)): 1) The integral curves of

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4
(over)

L.M. Beljaev, Jr.

the dependence of the impulses upon the scintillations and the relative amount of the impulses for different crystals.

2) The average light current in the amplifier.

The output of the gamma luminescence increases with increasing concentration of the activator at NaJ much quicker than at KJ. The mechanism of the energy yield from the basic material to the activator is more effective at NaJ than at KJ. At NaJ - Tl the scintillations are brighter than at KJ - Tl, but the total brightness is greater at KJ (if the concentrations are sufficiently high).

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DM

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Translation D419421, Pg. 15

CHUZHINOV, D.K.

ZAMOR'ONOV, M.P.; CHUZHINOV, D.K.; PECHKOVS'KIY, V., redaktor; PISARENKO, V., tekhnicheskii redaktor.

[Organisation of continuous operation in preparatory mine workings; practice of mines of the Ministry of Local and Fuel Industries of the Ukrainian S.S.R.] Organizatsiia tsyklichnoi roboty u pidhotovchykh vyrobitkakh. Z dosvidu shakht ministerstva mistsevoi i palyvnoi promyslovosti ukrains'koi RSR, Kyiv, Derzhavne vyd-vo tekhnichnoi lit-ry URSR, 1953. 42 p. (MLRA 8:2)

(Ukraine--Coal mines and mining)

CHUZHINOV, D.K., gornyy inzh.

Use of the M-9 machinery unit at the Kirov Mine of the Rostovugol'
Combins. Ugol' Ukr. 3 no.4:34-36 Ap '59. (MIRA 12:7)
(Donets Basin--Coal mining machinery)

CHUZHINOV, D.K., gornyy inzh.

UMK-1 machine unit performs six cycles per day. Ugol' Ukr. 3 no.11:26-29
N '59. (MIRA 13:3)

(Coal mining machinery)

CHUZHINOV, D.K., gornyy inzhener

Ways of increasing the rate of **stoping operations in mining**
with coal plows. Ugol' Ukr. 5 no.10:31-32 O '61. (MIRA 14:12)
(Coal mines and mining)

CHUZHINOV, D.K., aspirant

Classification of mechanized coal mining in flat seams. Sbor.-
DonUGI no.20:109-118 '61. (MIRA 15:6)
(Mining engineering) (Coal mining machinery)

CHUZHINOV, D.K., aspirant

Ways of increasing the rate of longwall operations and labor
productivity in connection with the use of the K-52m complex.
Sbor.DonUGI no.20:134-151 '61. (MIRA 15:6)
(Coal mines and mining--Labor productivity)
(Coal mining machinery)

CHUZHINOV, D.K.

Method of determining the normal load on a stope. Sbor. DonUGI
no.28:135-141 '62. (MIRA 16:8)
(Coal mines and mining)

CHUZHINOV, D.K.

Ways of increasing the load of stopes equipped with "Donbass-1"
cutter-loaders and USB plows. Sbor. DonUGI no.28:141-155 '62.
(MIRA 16:8)

(Coal mining machinery)

UNION, L.M., Incl.; BOB BOW, G.T., Incl.; W. BOWEN, L.M., Incl.; W. BOWEN, L.M., Incl.

Analysis of operations to longfalls not fulfilling the standards
of cyclical. Cher. PerUCI no. 22.71-20 1-3. (MIA 17:10)

CHUZHINOVA, A., profsoyuzny, organizator grupp

Why our activists are dissatisfied. Sov.profsoiuzy 18 no.12:26
Je '62. (MIRA 15:6)

1. Uchastok povorotnykh ram tsekha metallokonstruktsiy
ekskavatornogo zavoda, g. Kovrov, Vladimirskoy oblasti.
(Kovrov--Excavating machinery)

TSVETAYEV, A.A.; GLAZUNOV, M.P.; KISELEV, V.A.; ALEKSEYEV, L.A.;
CHUZHKO, R.K.

Determination of the activation energy of vaporization from
various faces of a zinc single crystal. Zhur.fiz.khim. 35
no.12:2800-2801 D 1961. (MIRA 14:12)

1. Akademiya nauk SSSR, Institut fizicheskoy khimii.
(Evaporation) (Zinc crystals)

BALAKHOVSKIY, O.A.; TSEYTLIN, V.Z.; CHUZHKO, R.K.

Dilatometric method for evaluating the preferential
orientation of grains in deformed metals with a hexagonal
lattice. Zav.lab. 28 no.10:1207-1208 '62. (MIRA 15:10)

1. Institut fizicheskoy khimii Akademii nauk SSSR.
(Metal crystals)

ACCESSION NR: AP4013554

G/0030/64/004/002/0299/0309

AUTHOR: Tsvetayev, A. A.; Chuzhko, R. K.; Golovanov, Yu. N.

TITLE: Kinetics of the recombination of Frenkel paired defects in the annealing of deformed metals

SOURCE: Physica status solidi, v. 4, no. 2, 1964, 299-309

TOPIC TAGS: recombination kinetics, Frenkel paired defects, annealing of deformed metal, kinetic equation, physical meaning, isothermic curve, deformed cobalt, deformed nickel, intruded atom

ABSTRACT: On the basis of Frenkel's concepts of the heat movement of defects in metals, the paper attempts to derive kinetic equations for the changes in concentration of the point defects in the recombination stage of the annealing of deformed metals and to establish the physical meaning of their values. The accuracy of the solution was verified on cobalt from the recovery of specific electric resistance. It was shown that the kinetics of recombination are most probably determined by the movement of intruded atoms, as concluded by Schumacher et al. (Z. Naturf. B 17, 1962), who showed that the recovery of properties in the third stage

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ACCESSION NR: AP4013554

of annealing of deformed nickel is determined by the movement of intruded atoms and their recombination with the vacancies. The energy of activation in this process is 1.03 eV. The natural vibration period of the intruded atom is estimated at about 10⁻¹⁰ s. There are sections on "Theory," "Methods of experimentation," "Experimental determination of the stages of annealing of deformed cobalt," and "Analysis of isothermic curves." Original has 17 equations and 10 graphs.

ASSOCIATION: Institut Fizicheskoy Khimii Akademii nauk SSSR, ^{Moscow} (Institute of Physical Chemistry of the Academy of Sciences of the USSR)

SUBMITTED: 15Nov63

DATE ACQ: 02Mar64

ENCL: 00

SUB CODE: PH

NO REF SOV: 006

OTHER: 008

Card 2/2

I 63948-65 EWT(1)/ENG(m)/T/ENG(c) LJP(c) DM/AT

ACCESSION NR: AP5022494

UR/0089/65/018/006/0642/0644

AUTHOR: Tsvetayev, A. A.; Golovanov, Yu. N.; Chuzhko, R. K.; Kirillov, I. V.

TITLE: Thermoelectric properties of polycrystalline uranium

SOURCE: Atomnaya energiya, v. 18, no. 6, 1965, 642-644

TOPIC TAGS: thermoelectric property, uranium, crystal

ABSTRACT: The absolute differential thermoelectric properties (ϵ) and the Thompson emf for metals (σ) were studied as functions of temperature for uranium of various purity. Specimens of (99.83 and 99.98%) pure uranium wires 1.5 mm in diameter, ~50 mm long with two welded thermocouples (Pt-PtRh) at its ends were heated in argon at a rate of ~5°C/min. Calculated curves for magnitudes of $\epsilon U = f(T)$ for various specimens are constructed and analyzed. Orig. art. has 2 graphs.

ASSOCIATION: none

SUBMITTED: 24Jul64

ENCL: 00

SUB CODE: SS, EM

NO REF SOV: 007

OTHER: 006

NA

Card 1/1

9(1)

AUTHORS:

Dobrovol'skiy, I.F., and Chuzhkov, Yu.P. SOV/162-58-3-7/26

TITLE:

The Practical Value of the Kelleher Lens (K voprosu o prakticheskoy tsennosti linzy Kellekhera)

PERIODICAL:

Nauchnyye doklady vysshey shkoly, Radiotekhnika i elektronika, 1958, Nr 3, pp 48-53 (USSR)

ABSTRACT:

The authors compare the Kelleher lens to an ordinary hyperbolic lens. The results of experiments show the directivity patterns of both lenses are practically identical under equal radiation conditions. The directivity diagram of the Kelleher lens is not a specific feature of the latter, if compared to the diagrams of horn and reflector antennas. Calculations performed by the authors show that the manufacture of the more complicated Kelleher lens require a greater amount of material than the hyperbolic lens with the same opening. There are 4 graphs and 1 English reference.

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The Practical Value of the Kelleher Lens

SOV/162-58-3-7/26

ASSOCIATION: Sibirskiy fiziko-tekhnicheskoy nauchno-issledovatel'-
skiy institut (Siberian Scientific Research Institute
of Physical Engineering)

SUBMITTED: February 5, 1958

Card 2/2

CHUCHKALOV, A.; KOPOSOV, M.; PERFIL'YEV, N.; MAKAROV, V.; GUBANOV, A.;
YEGOROV, L.; CHUZHMER, A., aspirant

Creative initiative of the masses and the establishment of norms.
Sots. trud 8 no.9:87-97 S '63. (MIRA 16:10)

1. Starshiy instruktor otdela proizvodstvennoy raboty i zarabotnoy platy Altayskogo promyshlennogo krayevogo soveta professional'nykh soyuzov (for Chuchkalov).
2. Nachal'nik byuro tekhnicheskoy informatsii Leningradskogo vagonostroitel'nogo zavoda im. I.Ye.Yegorova (for Koposov).
3. Zamestitel' nachal'nika otdela organizatsii truda Cherepovetskogo metallurgicheskogo zavoda (for Perfil'yev).
4. Nachal'nik otdela truda i zarabotnoy platy Lyublinskogo liteyno-mekhanicheskogo zavoda (for Makarov).
5. Starshiy inzh. Lyublinskogo liteyno-mekhanicheskogo zavoda (for Gubanov).
6. Starshiy inzh. otdela truda i zarabotnoy platy Ural'skogo turbomotornogo zavoda (for Yegorov).
7. Ural'skiy universitet (for Chuzhmer).

CHUZHOVA, A. P.

CHUZHOVA, A. P. -- "Pink Knotweed and Its Control under Conditions of Irrigation."
*(Dissertations for Degrees in Science and Engineering Defended at USSR Higher Educational
Institutions) Min Higher Education USSR, Saratov Agricultural Inst, Saratov, 1954.

SO: Knizhnaya Letopis' No. 31, 30 July 1955.

*For the Degree of Candidate in Agricultural Sciences.

KONSTANTINOV, Semen Ivanovich; CHUZHOVA, A.P., red.

[Viticulture in Astrakhan Province] Vozdelyvanie vinograda
v Astrakhanskoi oblasti. Astrakhan', Volga, 1962. 68 p.
(MIRA 18:3)

Country	:USSR	F
Category	:Microbiology. Antibiosis and Symbiosis. Antibiotics.	
Abs. Jour	:Ref Zhur-Biol., No 23, 1958, No 103753	
Author	:Chuzhova, Z.	
Institut.	:---	
Title	:A Medicinal Lactic-Acid Kurung Beverage and Its Antibiotic Properties	
Orig Pub.	:Molochn. prom-st., 1958, No 6, 34-35	
Abstract	:No abstract.	

Card: 1/1

CHUZHOVA, Z.P.; SHUBINA, L.N.

Microbiological processes in butter made with the continuous method.
Izv.vys.ucheb.zav.; pishch.tekh. no.5:37-42 '63. (MIRA 16:12)

1. TSentral'nyy nauchno-issledovatel'skiy institut maslodel'noy
i syrodel'noy promyshlennosti, mikrobiologicheskaya laboratoriya.

CHUZHOVA, Z.P.

"Kurunga", a medicinal and dietetic beverage from cow's milk.
Vop. pit. 23 no.5:58-63 S-O '64. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut maslodel'noy
i syrodel'noy promyshlennosti, Uglich.

CHUZHOVA, Z.P.; SHUBINA, L.N.; ZALASHKO, M.V.; MAKAR'INA, N.V.

Physiological and biochemical characteristics of aroma-producing
Streptococcus diacetylactis cultures. Mikrobiologiya 33 no.3:522-
527 My-Je '64. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut masloedel'noy
i syrodel'noy promyshlennosti. Submitted January 8, 1963.

KHALITOV, R.; CHUZHUK, I.; IVANOV, V.

Readers' letters. Fin. SSSR 22 no.9:80-83 S '61. (MIRA 14:9)

1. Starshiy kontroler-revizor Kontrol'no-revizionnogo upravleniya Ministerstva finansov Moldavskoy SSR (for Khalitov).
 2. Starshiy inspektor gosdokhodov Vulkaneshtskogo rayfinotdela Moldavskoy SSR (for Chuzhuk).
 3. Zaveduyushchiy Tsentral'nyy rayfinotdelom Odessy (for Ivanov).
- (Moldavia--Agriculture--Economic aspects) (Auditing)

CHUZO, Nagaishi, dr., prof.

The status of tuberculosis in Japan. Tuberkulozis 16 no.10:
297-298 0 '63.

1. A Kyotoi egyetem Tuberkulozis Intezete, Japan, kozlemenye.
(TUBERCULOSIS) (TUBERCULOSIS PULMONARY)
(MASS SCREENING TECHNIQS) (BCG VACCINATION)
(ISONIAZID) (COMMUNICABLE DISEASE CONTROL)

CHUZO, Nagaishi, dr., prof.

Cavernostomy. Tuberkulozis 16 no.10:299-301 0 '63.

1. A Kyotoi egyetem Tuberkulozis Intezete, Japan, kozlemenye.
(TUBERCULOSIS, PULMONARY) (SURGERY, OPERATIVE)
(THORACOPLASTY) (PNEUMONECTOMY) (STATISTICS)
(PENICILLIN)

S/130/61/000/001/004/006
A006/A001

AUTHORS: Gutnikov, E. Yu., Chuzo, N. N.

TITLE: Automatic Machine to Measure the Length of Rolled Work

PERIODICAL: Metallurg, 1961, No. 1, pp. 23-25

TEXT: Uralmetallurgavtomatika has developed a contact photoelectric device of the *ММ-9* (LEM-59) type to measure the length of moving rolled stock during the rolling process. The device operates from the radiation of the heated metal. Its measuring principle is similar to that of a machine described in an American Periodical (Iron and Steel Engineer, 1959, No. 1, p. 137). Lead-sulfide photo resistances, very sensitive to infrared radiation, are used as photo-transducers. The automatic device measures the variable section of the work up to 500 mm length, the constant section may be of any length. The principle electric circuit diagram of the machine is shown in Figure 1. The front edge of the rolled work (A) when leaving the rolls enters the restricted visual field of the basic photo resistance (block 5) connected to the input of the basic electronic d-c amplifier (block 2) with relay characteristics. Pulses from the rolled work are transmitted to the starting anodes of thyatronns with a cold МТХ-90 (MTKh-90) type cathode; the

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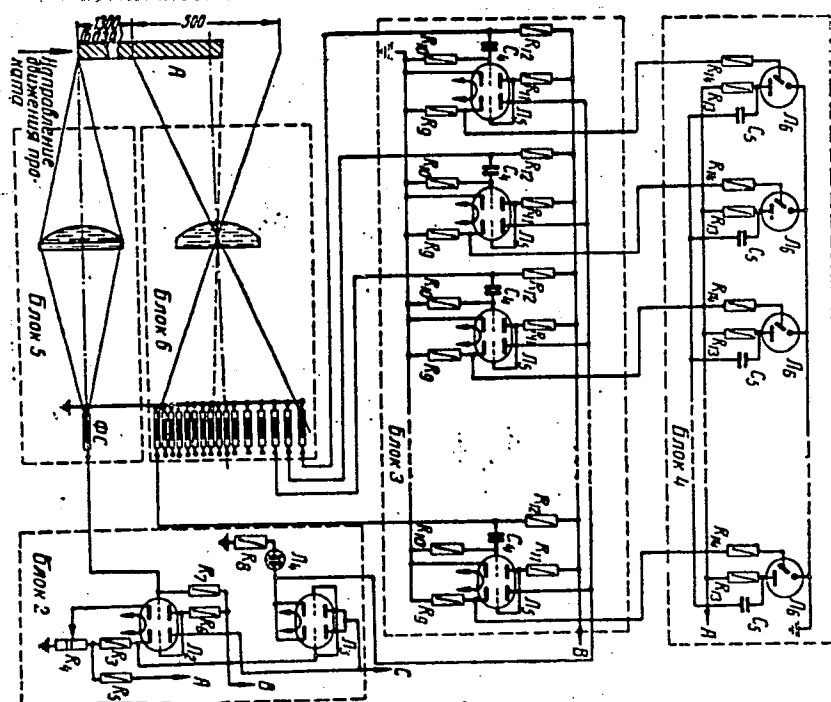
Automatic Machine to Measure the Length of Rolled Work

S/130/61/000/001/004/006
A006/A001

thyratrons may be in ignited or extinguished state. The glow thyatron indicates the measured length of the rolled work on a scale. An original system of thyatron extinction is used, assuring in multi-channel systems, the summarizing of all incoming pulses. The use of such photo-electric devices is made difficult when water-cooling the rolls, due to the formation of vapors. To eliminate the effect of vapors on measurement and to reduce the measuring time, the arrangement of the basic block 5, was improved. Instead of being mounted at the rear of the stand the block was fastened at the front side in such a manner that the departure of the rear end of the rolled work was instantaneously fixed, as soon as the work disappeared in the roller gap, independent of vapor formation. (Figure 2). The length of rolled work can be measured with an accuracy of ± 10 mm. The machine was tested during industrial operation and satisfactory results were obtained. Facilitated attendance, a decrease of rejects, and higher labor efficiency are the advantages of automatic measuring of rolled work, in particular, on sheet rolling mills.



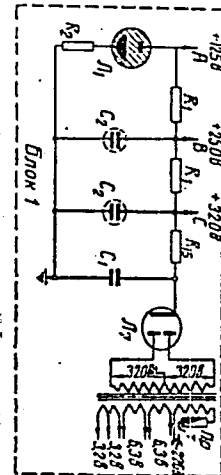
Card 2/4



S/130/61/000/001/004/006
A006/A001

Automatic Machine to
Measure the Length of
Rolled Work

Figure 1:



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3/4

Automatic Machine to Measure the Length of Rolled Work

S/130/61/000/001/004/006
A006/A001

Figure 2:

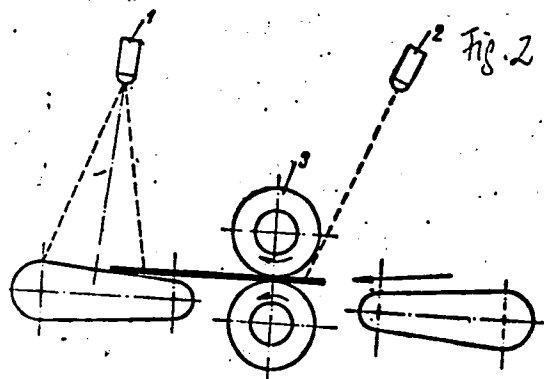


Figure 1

Schematic diagram of the automatic measuring device

Figure 2

Installation of the basic head of the automatic measuring machine

1 - block 6; 2 - block 5; 3 - rolls.
There are 2 figures and 1 American reference.

ASSOCIATION: Uralmetallurgavtomatika

CHUZO, Nagaiszi, dr., prof.; YOSHIO, Okada, dr.; SHIGETOSHI, Ishiko, dr.;
SHIGEO, Daido, dr.

Electron microscopic picture of the healthy and diseased lung.
Tuberkulozis 17 no.2:40-46 F '64.

1. A kyotoi Egyetem Tbc kutatointezetenek Sebeszeti klinikaja
(Japan) kozlemenye.

CHVALA, B., doc. inz. CSc.

Belleville clamping springs from plastics. Strojirenstvi 15 no.1:
29-35 Ja '65.

1. Czech Higher School of Technology, Prague.

ACC NR: ~~AP6002825~~ ~~EMP(1)/EMP(2)/EMP(3)/EMP(4)~~

SOURCE CODE: CZ/0032/65/015/001/0029/0035

AUTHOR: Chvala, B. (Doctor, Engineer, Candidate of sciences)

ORG: CVUT, Prague

TITLE: Belleville clamping springs made of plastics

SOURCE: Strojirenstvi, v. 15, no. 1, 1965, 29-35

TOPIC TAGS: synthetic material, spring, metal machining, metal finishing

ABSTRACT:

Steel Belleville clamping springs with radial slots are not widespread in Czechoslovakia, because of their expensive and complicated technology. It is proposed to replace the steel springs with simple rings made of plastic, since the technology of their production is more simple and less expensive. The rings are suitable for rough machining and finishing. Tables are presented containing the data necessary to select the right ring for various machining operations and types of workpieces. This work was presented by Engr. A. Rezac. Orig. art. has: 14 figures, 13 formulas, and 10 tables. [JPRS]

SUB CODE: 13, 11 / SUBM DATE: none

Card 1/1

CHVALA, J.; ZATLOUKAL, F.

Sprengel deformity combined with other anomalies in a 7-year-old girl.
Cesk. pediat. 14 no.2:143-146 5 Feb 59.

1. II. klinika pro ortopedii a detskou chirurgii fakulty detskeho
lekarstvi, vedouci prof. MUDr. O. Hn\vkovsky. J. Ch., Praha 16, Lidicka 1.
(SCAPULA, abnorm.

Sprengel's abnorm., with other anomalies, in 7-year-old
girl (Cs))

CHVALA, M; MOUCHA, J.

"A contribution to the knowledge of horseflies (Diptera, Tabanidae) in Slovakia. English."

SBORNIK FAUNISTICKYCH PRACI. ACTA FAUNISTICA ENTOMOLOGICA, Vol. 1, 1956
Praha, Czechoslovakia.

Monthly list of EAST EUROPEAN ACCESSION INDEX (EEAI), Library of Congress,
Vol. 8, No. 7, July, 1959

Unclassified

CHVALA, M; SVOBODA, V.; KURES, J.

Gasification of coal-washing residues from Ostrava. p. 359.

ENERGETIKA. (Ministerstvo energetiky a Ceskoslovenska vedecka technika
spolecnost pro energetiku pri Ceskoslovenska akademii ved) Praha, Czechoslovakia.
Vol. 9, no. 7, July 1959.

Monthly list of East European Accessions (EEAI) LC, vol. 9, no. 1, Jan. 1960.

Uncl.

CHVALA, Milan

Contribution to the knowledge of thickheaded flies (Diptera,
Conopidae) of Silesia. Part 2. ~~Prir~~ cas ~~slesky~~ 23 nol.117-122
'62.

MOUCHA, Josef, CSc.; CHVALA, Milan, dr.

Notes on the genus *Theriopectes* Zeller, 1842 (Diptera, Tabanidae).
Cas entom 61 no.2:100-105 '64.

1. Department of Entomology, National Museum, Prague-Kunratice (for Moucha). 2. Chair of Systematic Zoology, Charles University, Prague, 2, Vinicna 7 (for Chvala).

VALEYEV, A.Sh.; CHVALA, M.A.

Photoelectrochemical study of anodic dissolution of iron.
Izv. AN SSSR. Ser. khim. no.11:1946-1949 '65. (MIRA 18:11)

1. Khimicheskiy institut im. A.Ye. Arbuzova AN SSSR.

OLSUFJEV, Nikolaj Grigorjevic [Olsuf'yev, Nikolay Grigor'yevich], prof
dr. (Moscow D-317, ul. Sedogo 3, kv.34); MOUCHA, Josef, dr. (Prague
1-1700, Vaclavske namesti 68); CHVALA, Milan, dr. (Prague 2, Vinicna 7)

Chrysozona scutellata sp. n. (Diptera, Tabanidae) from Central
Europe. Cas entom 61 no.3:284-286 '64.

1. Institute of Microbiology and Epidemiology, Academy of Medical
Sciences, Moscow (for Olsufjev). 2. Department of Entomology,
National Museum, Prague (for Moucha). 3. Chair of Systematic Zoology
Faculty of Natural Sciences, Charles University, Prague (for Chvala).

CHVALA, Milan, dr. (Prague 2, Vinicna 7)

Some new or little known Tabanidae (Diptera) from Czechoslovakia.
Cas entom 61 no.4:374-383 0 '64.

1. Chair of Systematic Zoology of the Charles University,
Prague. Submitted on March 24, 1964.

CHVALA, Milos, inz.

Partial automation of ring-type ball mills. Energetika Cz 12 no.2:
78-79 F '62.

1. Odbytove sdruzeni paliv, Praha.

CHVALA, Milos, inz.

Combustion of coal with a high ash content in melting stoves.
Energetika Cz 11 no.10:498-499 0 '61.

CHVALA, Milos, inz.

Information on the acceptance and operation of boilers with
feed head. Energetika Cz 14 no.12:605-607 D '64.

1. Uhlozbyt, Usti nad Labem.

CHVALA, Milos, inz.

Combustion of the coarse-grained coal dust from the Kozorany
separating plant on the CKD Dukla traveling grate. Energetika
Cz 15 no.1:18-19 Ja '65.

1. Uhlozbyt, Usti nad Labem.

ACCESSION NR: AP4036976

S/0078/64/009/005/1305/1306

AUTHOR: Gromakov, S. D.; Kurinnaya, V. N.; Letyapov, Z. M.; Chvala, M. A.

TITLE: A new modification of zone purification of materials.

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 5, 1964, 1305-1306

TOPIC TAGS: zone purification, method, crystallization front, monocrystal production, semiconductor, sodium nitrate, cadmium nitrate tetrahydrate, impurity separation, heating device, design

ABSTRACT: A method of zone purification was developed in which the crystallization plane area is increased, thereby enhancing the production of larger monocrystals particularly applicable in the production of semiconductors. This was accomplished by devising a method for maintaining the same temperature gradient near the periphery of the molten zone as in its center. Thus, heating circuits were constructed in the form of the curvature of the molten zone and of such design as to create a planar crystallization front by compensating for the heat removal. Perforated metal grids or conductors between electrodes (rectangular shape for rectangular rods or circular for cylindrical bars) may be used. These

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ACCESSION NR: AP4036976

should be of metals or alloys nonreactive with the molten metal. In a simple design, a vertical cylinder was heated at different temperatures. It was heated in the upper section to a temperature higher than the fusion temperature of the material and in the lower section to a lower temperature. A test tube containing the sample was lowered slowly so crystallization started at the bottom. A rigid heating element was kept at the temperature boundary to give a planar crystallization front. Tests run with sodium nitrate and cadmium nitrate tetrahydrate using colored impurities (sample lowered at 12 mm/hr) showed the impurities to be collected at one end of the bar. Orig. art. has: 2 figures.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet, (Kazan State University);
Penzenskiy pedagogicheskiy institut (Penza Pedagogical Institute)

SUBMITTED: 16 Nov 62

DATE ACQ: 05 Jun 64

ENCL: 00

SUB CODE: GC,IE

NO REF SOV: 000

OTHER: 000

Cord 2/2

L 16066-65 EWT(1)/EWP(e)/EPA(s)-2/ENG(k)/EWT(m)/EPP(c)/EPF(v)-2/ENG(v)/
 EPR/EPA(w)-2/EPF(j)/T/EA(s)/EWA(h) P2-3/P3-4/P4-10/Pe-0.0Pr-4/P5-4/P6-1/
 Pt-10/Pu-4 IJP(c)/ESD(t)/AFWL/ASD(a)-5 WH/AT/RM/VH
 ACCESSION NR: AP4046457 S/0078/64/009/010/2485/2487

AUTHOR: Gromakov, S. D. ; Zoroatskaya, I. V. ; Laty*pov, Z. M. ; Chvala,
 M. A. ; Eydel'man, Ye. A. ; Bady*gina, L. I.

TITLE: Method for investigating phase diagrams of semiconducting systems

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 10, 1964, 2485-2487

TOPIC TAGS: semiconductor, phase diagram, semiconductor system, test
 apparatus design, solidus temperature, liquidus temperature

ABSTRACT: A method was developed for obtaining thermal data for semiconducting materials which avoids the inherent difficulties of air oxidation, thermal decomposition, and reaction with thermocouple and container materials. The material for thermographic investigation is placed in a quartz ampoule (3-4 mm i. d. 25-30 mm long), sealed under 1-2 mmHg. The thermocouple (fig. 1) made of 3-5 x 12-14 mm platinum foil (a) with soldered platinum rhodium leads (b, c) is arranged so the platinum foil surrounds the ampoule (fig. 1-C). The ampoule is

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L 16066-65

ACCESSION NR: AP4046457

placed in a quartz tube filled with alumina for thermal insulation; and heated in a vertical electric furnace. Using this arrangement, the solidus and liquidus temperatures were obtained for the binary systems PbS-PbSe, PbS-PbTe, CdTe-ZnTe, CdTe-HgTe, and phase diagrams (fig. 2) were constructed. Orig. art has: 4 tables and 3 figures.

ASSOCIATION: Kazanskiy gosudarstvennyy universitet (Kazansk State University) Penzenskiy pedagogicheskiy institut (Penzensk Pedagogical Institute)

SUBMITTED: 01Feb62

ENCL: 02

SUB CODE: SS

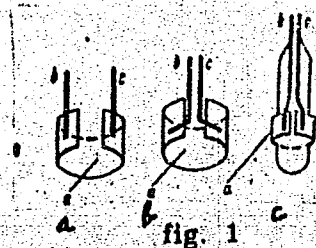
NO REF SOV: 001

OTHER: 000

Card 2/4

L 160-6-65
ACCESSION NR: AP4046457

ENCLOSURE: 01



Arrangement of the individual thermocouples

Card 3/4

L 16 66-65

ACCESSION NR: AP4046457

ENCLOSURE: 02

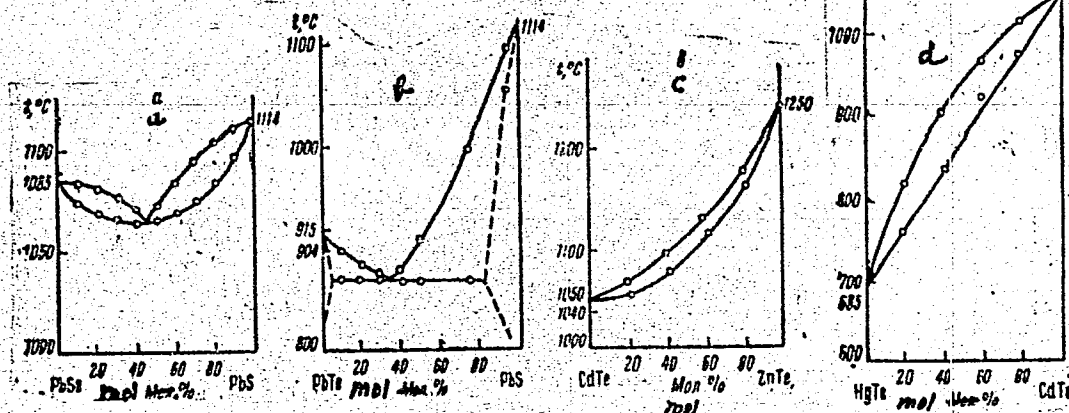


fig. 2 Phase diagrams of the binary systems:

a--PbSe-PbS; b--PbTe-PbS; c--CdTe-ZnTe; d--HgTe-CdTe

Card 4/4

CHVALCHRELIDZE, AA.

✓ Emulsion for lubrication of wool, half-wool, and similar
fiber mixtures. A. A. Chvalchrelidze, I. Ye. Sosun, A. A.
Pantel'kin, N. Yu. Berkovich, M. A. Porduman, L. A.
Zlotovskii, and A. G. Bol'shakova. U.S.S.R. 103,848,
Sept. 25, 1956. Aq. emulsions are used contg. NH_4OH
or soda and bentonitic clays, e.g., askanite or askanigel.
M. Hesch

Mezys

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CHVALINA, J.

New information brought to us by the exhibition "New Techniques in Housing Construction." p.32. POZEMNI STAVBY. (Ministerstvo stavebnictvi) Praha. Vol. 3, no. 1, Jan. 1955.

SOURCE: East European Accessions List (EEAL), Library of Congress, Vol. 4, No. 12, December 1956.

CHVALINA, J.

Use of the Wolf crane in housing construction. p. 65,

Vol. 4, no. 2, Feb. 1956
POZEMNI STAVBY
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 8, August 1956

CHVALINA, J.

Erection of a boarding school for the Podzatecka housing project in
Most. p. 635

POZEMNI STAVBY. (Ministerstvo stavebnictví) Praha, Czechoslovakia, Vol.
7, no. 12, 1959

Monthly List of East European Accessions (EEAI), LC. Vol. 9, no. 2,
Feb. 1960

Uncl. .

NAPRAVNIK, J., inz.; CHVALINA, J.

Concreting of channels by the vacuum technique. Poz stavby 11
no.7:387-390 '63.

1. Pozemni stavby Usti nad Labem.

CHVALOVSKY, V.

Organosilicon compounds. I. Fission of aryl-silicon bonds by means of nitric acid. V. Chvalovský and V. Ražant (Central Chem. Research Inst., Prague). *Collection Czechoslov. Chem. Commun.* 16, 680-690 (1951) (in English).

—Treatment with HNO_3 detaches not only the aryl groups directly bound to Si in mixed arylalkylsilanes and siloxanes, but also the orientation of the Si substituent, since aromatic nitro derivs. are formed which carry NO_2 at the former position of Si (cf. Kipping, *C.A.* 1, 1420). Appropriate aryl Grignard reagents convert SiCl_4 to the corresponding arylchlorosilanes, and these with MeMgCl yield the arylmethylsilanes used. Reaction conditions, yields, and analyses of the products are detailed for $p\text{-XC}_6\text{H}_4\text{SiCl}_3$ (I), $(p\text{-XC}_6\text{H}_4)_2\text{SiCl}_2$ (II), $p\text{-XC}_6\text{H}_4\text{SiMe}_2$ (III), $(p\text{-XC}_6\text{H}_4)_2\text{SiMe}_2$ (IV), $m\text{-MeC}_6\text{H}_4\text{SiCl}_3$ (V), and $m\text{-MeC}_6\text{H}_4\text{SiMe}_2$ (VI). Compd. X, b.p./mm., and other phys. consts. are: I, H , 200–2°/748; I, F , 184.5–6.5°/738; I, Cl , 240.5–5.5°/744, 119–120°/35; I, Br , 264.5–5.5°/744, 140–1°/30; II, H , 303–5°/747; II, F , 293–4°/738, 175°/29; II, Cl , 304.5–7.5°/744, 234°/36, m. 71.2°; II, Br , 389–97°/739.4, 241–4°/24, m. 87–8°; V, 128°/48; III, H , 171–1.5°/745, d_4 0.8092, n_D^{20} 1.4904; III, F , 170–1°/745, d_4 0.9658, n_D^{20} 1.4751; III, Cl , 118.5°/43, 200°/737, d_4 1.0022, n_D^{20} 1.5097; III, Br , 158–9°/123, 231–3°/725.2, d_4 1.2153, n_D^{20} 1.5238; VI, 180–90°/725.2, d_4 0.8783, n_D^{20} 1.4948; IV, H , 173°/45, 276–6.5°/740, d_4 0.9867, n_D^{20} 1.5228; IV, F , 184–5°/80, d_4 1.1121, n_D^{20} 1.5331; IV, Cl , 225–8°/39, 234–6°/740, m. 47°; IV, Br ,

383.5–7.5°/739.4, m. 74°. Fission of the C–Si bond in III, IV, and VI is accomplished by boiling 7 hrs. in a soln. of 71% HNO_3 in Ac_2O . Hydrolysis of the reaction mixt. followed by removal of AcOH yields as products, separable by distn. or crystn., 61–65% NO_2 compds. and 46–56% alkylsiloxanes. The latter are formed under the conditions of the expt. by instantaneous condensation of the intermediate silanols. The polymers $(Ph_3Me_2SiO)_n$ (VII), b , above 200°, d_4 1.081, n_D^{20} 1.5159; and $[(p\text{-FC}_6\text{H}_4)_2\text{Me}_2SiO]_n$ (VIII), b , above 200°, d_4 1.1120, n_D^{20} 1.4892, are prepd. from MeMgCl and a mixt. of SiCl_4 and the appropriate arylchlorosilane. Fission by HNO_3 , as above, yields from VII PhNO_2 and a colorless solid $(Ph_3Me_2SiO)_n$; from VIII $p\text{-FC}_6\text{H}_4\text{NO}_2$ and a colorless solid $[(p\text{-FC}_6\text{H}_4)_2\text{Me}_2SiO]_n$. For III, IV, and VI, A.R. values calcd. from n agree reasonably well with those calcd. by the use of the data of Denbigh (*C.A.* 35, 671) and Warrick (*C.A.* 41, 1510).

H. S. French

CH₃ LOVSKY, V.

Organosilicon compounds. II. Preparation of methylchlorosilanes and methylpolysiloxanes from chlorosiloxanes. I. H. Radzinskii, V. M. Chvalovskiy, and Vladimir Lazul, *Chem. Akad. Ved., SSSR, Khim. Tver. Subst.* 47, 1387-93 (1953); cf. *Chem. Abstr.* 48, 10421. — Abs. EtOH dropped during 4 hrs. into SiCl₄ under reflux yielded ClSiOEt (I), b. 102-5°, and ClSi(OEt)₂ (II), b. 133-6°. The chlorosiloxanes did. with 500 ml. Et₂O were treated under stirring and ice-cooling with MeMgCl to give the corresponding methylchlorosilanes. Cl atoms react preferentially to OEt groups. From II were obtained MeSi(OEt)₂ (IV) and MeSiOEt (III) in varying proportions depending on the molar ratio of chlorosiloxane-MeMgCl. Total yields ranged from 38.3 to 68.4% (the yield of III from 5:1-50:5% of IV from 8.8-47.4%) when 5-60% molar excess of MeMgCl was used. From I and MeMgCl (molar ratio 1:1) was obtained III in 51-57.8%. The methylchlorosilanes were isolated either by repeated extr. with Et₂O, or by distn. Into 530 g. I did. with 1 l. Et₂O was dropped, during 3 hrs., 2795 ml. ether soln. of MeMgCl (6.15 moles), the mixt. stirred 3 hrs., hydrolyzed with 2500 ml. HCl (1:4), the Et₂O distd. off, the residue boiled with half its vol. concd. HCl, washed with H₂O, dried, and distd. to give 142.4 g. (87.6%) (MeSi)₂O (V), b. 98-101°. Treating a mixt. of I and II did. with 200 ml. Et₂O, during 4 hrs., with an Et₂O soln. of MeMgCl, hydrolyzing the mixt. during 1.5 hrs. with 800 ml. dil. HCl (1:4), evapg. the Et₂O, and shaking the oil 30 hrs. with 4% H₂SO₄ gave a practically quant. yield of *silicone oil*. I (359 g.) and 83.3 g. Si(OEt)₂ did. with 400 ml. Et₂O treated during 4 hrs. with 2380 ml. Et₂O, giving 6.1 mole MeMgCl, stirred 5 hrs., shaken 1.5 hrs. with 800 ml. HCl (1:4), the Et₂O layer washed with H₂O, the Et₂O evapd., and the product shaken 30 hrs. with 4% H₂SO₄, gave, after distn., 45 g. V, b. 97-100.5°, and 78 g. (50%) (MeSiO)₂Si, b. 217-18.5° d₄²⁰ 0.879, n_D²⁰ 1.3871. M. Hudlicky

CHVALOVSKY, V.

Bažant, V., Chvalovsky, V., and Rathousky, J.: Silicones. Prague: SNTL. 1954. 312 pp. Kts. 42. Reviewed in Chem. Listy 49, 1414(1955).

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2 MAY/OUTZ

Bažant, V., Chvalovsky, V., and Rathousky, J.: Silikony. Prague: SNTL. 1954. 312 pp. Kts. 42. Reviewed in Chem. Listy 49, 1414(1955).

CH

②

CHVALOVSKY, V.

CHVALOVSKY, V. Silicon organic compounds. V. Decomposition of phenyl silicon compounds by aqueous hydrogen chloride. In German. p. 93. Vol. 21, No. 1, Feb 1956. SBORNIK CZECHOSLOVATSKIKH KHMICHESKIKH RABOT. COLLECTION OF CZECHOSLOVAK CHEMICAL COMMUNICATIONS. Praha, CZECHOSLOVAKIA.

SOURCE: EAST EUROPEAN ACCESSIONS LIST (EEL) VOL 6, NO 4, APRIL 1957

CHVALOVSKY, MATOUSHEK

CZECHOSLOVAKIA/Chemical Technology - Chemistry of Compounds with High Molecular Weights. I.

Abs Jour : Ref Zhur - Khimiya, No 16, 1958, 56307

Author : Khvalovsky, Matoushek, Bazhant

Inst : -

Title : Silica-Organic Polymers (Silicones). I. Alkaline Condensation of Silicones Having Low Molecular Weight.

Orig Pub : Chem. promysl., 1957, 7, No 7, 377-381

Abstract : The polycondensation of methyl siloxanols (MS) and methyl phenyl siloxanols (MPS) which have low molecular weights was investigated. The experiments were carried out at $\sim 20^{\circ}\text{C}$. at a ratio of R:Si 2, using potassium hydroxide as the catalyst. It was demonstrated that the rate of viscosity increase, , is diminished when the ratio Si:K and R:Si are increased. At a constant ratio of R:Si, the magnitude of is increased with an increase in the MPS composition of CH_3 ratio to C_6H_5 ,

Card 1/2

CHVALOVSKY, V.

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

Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11363

Author : Chvalovsky, V. and Bazant, V.

Inst : ←

Title : Organosilicon Compounds. XII. The Synthesis of Hexamethyldisiloxane by the Alkaline Hydrolysis of an Azeotropic Mixture of Trimethylchlorosilane and Tetra-chlorosilane.

Orig Pub: Chem Listy, 51, No 1, 108-111 (1957) (in Czech); Sbornik Czechoslov Khim Rabot, 22, No 4, 1199-1202 (1957) (in German with a Russian summary)

Abstract: A procedure has been developed for the synthesis of hexamethyldisiloxane (I) by the alkaline hydrolysis of an azeotropic mixture (AM) of trimethylchlorosilane and SiCl_4 (46 : 54 mol%) (when 10% NaOH is used, 600 ml

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Abs Jour: Referat Zhur-Khimiya, No 4, 1958, 11363.

of solution and 38.8 gms AM are taken). The maximum yield of I (70-80%), bp 99-101°, is obtained when a 20-30% aqueous solution of NaOH is used. Higher and lower concentrations lower the yield. Tetrakis [sic]-trimethylcyloxy-silane, $[(CH_3)_3SiO]_4Si$ bp 220-222°/739 mm), has been isolated as a side product and constitutes 48.1% of the higher boiling substances formed during the hydrolysis.

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CHVALOVSKÝ, V.

PHASE I BOOK EXPLOTTATION

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Bažant, Vladimír, Engineer, Doctor, Winner of State Prize, Václav Chvalovský, Engineer, Doctor, Winner of State Prize, Jiří Rathouský, Engineer, Doctor, Winner of State Prize, Miroslav Schätz, Engineer, Jan Starch, Engineer, Otakar Kolář, Engineer, Antonín Dyk, Engineer, and Petr Hix, Winner of State Prize.

Technické použití silikonu (Industrial Use of Silicones) Praha, Státní Nakladatelství Technické Literatury, 1959. 365 p. (Series: Makromolekulární látky, sv. 3) 1,400 copies printed.

Reviewer: Jiří Čermak, Engineer; Tech. Ed.: František Trla; Resp. Ed.: Vladimír Spáčil, Engineer.

PURPOSE: This book is intended mainly for technicians who use silicones and for chemists doing research on the applications of silicones.

COVERAGE: The book is an introduction to silicone chemistry. Applications of silicones in the rubber industry, in the electrical and machine-manufacturing industries as surface finishes, and in various fields of technology as

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hydraulic fluids, oils, lubricants and pastes are treated extensively and the role of silicones in medicine, pharmaceuticals and cosmetics production is discussed. The use of silicone resins in the plastics industry is also treated. No personalities are mentioned. References are given at the end of each chapter.

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CHVALOVSKY, V.; KRUCHNA, O.

Preparation of silicon-alkyd resins. p. 433.

CHEMICKY PRUMYSL. Praha, Czechoslovakia. Vol. 9, no. 8, Aug. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. 9, no. 2, Feb. 1960.

Uncl.

CHVALOVSKÝ, V.

Distr: 4E3d/4E2c(j)

✓ Hydrophobization of glass by using methyl silicone resins, methyl chlorosilanes, and methyl phenyl silicone oils. 11.
 Jiří Rathouský and Václav Chvalovský (Chem. úst. CSAV, Prague). *Chem. průmysl* 9, 657-61 (1960).—The influence has been investigated of the concn., curing temp., curing catalyst, and of the ratio Me:Si (Ph:Si, resp.) on the hydrophobization of Na-Ca glass by Me silicone resins (I), blends of Me chlorosilanes (II) (Me:Si = 1.00-1.67), and Me Ph silicone oils (III) (Ph:Si = 0.2 and 0.8). Simultaneously the resistance has been estd. of the hydrophobic films against benzene (IV), 1% aq. solns. of NaOH, NaCl, and HCl, and towards the action of elevated temp. The prepn. is described of I with Me:Si = 1:3, 1:4, and 1:5. Carefully cleaned glass plates have been hydrophobized by solus. of 0.2-2% I with and without 3% Al(O-iso-Pr), in IV (0.4-3.0% II in IV, and 1.5% III in toluene, resp.), the film obtained being cured at 20-170° for 2 hrs. (20-140° for 2 hrs., and 260-340° for 12 hrs., resp.). The angle of contact (α) has been estd. of water with the hydrophobized glass surface and also after the action of IV, 1% NaOH, NaCl, and HCl at 50° for 2 hrs., and of elevated temp. (300° for 12 hrs.). Curing increases α by 2-3°, the curing temp. being of little importance. The hydrophobizing effect and the resistance of the hydrophobized surface against IV, 1% NaOH, NaCl, and HCl decreases in the order II > I > III, only the resistance towards elevated temp. being higher for III than for I. J. Seberda