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CIA-RDP86-00513R002064720014-5"

L 01259-66 EWT(1) IJP(c)

ACCESSION NR: AP5020790

UR/0048/65/029/008/1313/1316

AUTHOR: Gribkov, V. I.; Zhevandrov, N. D.

35
32
8

TITLE: Polarization of the phosphorescence of salicylic acid single crystals / Report, 13th Conference on Luminescence held in Khar'kov 25 June to 1 July 1964

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 8, 1965, 1313-1316

TOPIC TAGS: luminescence, phosphorescence, solution property, organic crystal, polarized luminescence, exciton

ABSTRACT: The authors have investigated energy migration in salicylic acid crystals by the polarized luminescence method previously developed by one of them (N.D.Zhevandrov, Tr. Fiz. in-ta AN SSSR, 25, 3, 1964). The shapes of both the fluorescence and phosphorescence spectra of the crystals were nearly the same at liquid nitrogen temperature as at room temperature, but the former was much higher at the lower temperature. At liquid nitrogen temperature the phosphorescence intensity at the moment excitation was discontinued exceed the fluorescence intensity by a factor 2.3. The fluorescence of crystal plates cut parallel to the (110) planes was 30% polarized. The polarization of the phosphorescence

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was rather low, being $\pm 5\%$ at room temperature or $\pm 5\%$ at liquid nitrogen temperature. Measurements with filters showed that the polarization of the phosphorescence was independent of wavelength. The polarization of the fluorescence of salicylic acid in isotropic solution in ethyl alcohol was only 10% and independent of concentration, and the phosphorescence was essentially unpolarized. From these data it is concluded, with the aid of the oriented gas model, that those oscillators that are responsible for molecular fluorescence and are differently oriented in the crystal lattice are inclined to each other at an angle of 40 to 50°, and those responsible for phosphorescence, at an angle of 90 to 100°. In crystals cut parallel to the (010) plane the fluorescence was 80% polarized and the phosphorescence was also strongly polarized, although it was too weak for accurate measurement. The phosphorescence decreased exponentially with a time constant of about 0.93 sec; this, within a few percent, was the same for solutions and crystals and was independent of concentration and state of polarization. In order to investigate energy migration the polarization of the luminescence of crystals cut parallel to the (110) plane was determined as a function of the polarization of the exciting radiation. It was found that the polarizations of both the fluorescence and the phosphorescence were independent of the polarization of the exciting light and that the polarization did not change during the

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decay of the phosphorescence. It is concluded that migration of energy from the initially excited molecules occurs only via the singlet and not via the triplet levels. Cases like this one, in which there is no migration via triplet states, are of great interest for an understanding of the forces that lead to formation of triplet excitons in molecular crystals. (Orig. art. has 2 figures)

ASSOCIATION: Fizicheskii Institut im. P.N. Lebedeva Akademii Nauk SSSR (Physics Institute, Academy of Sciences, SSSR)

SUBMITTED: 00

ENCL: 1

SER. ONE: 1

NO REF SOV: 005

OTHER: 012

Card ⁷⁴ 3/3

BELIKOVA, G.S.; VARNOLCHYEVA, V.N.; ZHEVANDROV, N.P.

Use of diagrams of luminescence polarization in determining the
orientation of impurity molecules in crystals. Izv. AN SSSR. Ser.
fiz. 29 no.8:1326-1330 '65. (MIRA 18:8)

1. Fizicheskii Institut im. P.M.Lavrieva AN SSSR i Institut kristallografi AN SSSR.

ZHEVANDROVA, V. I.

ZHEVANDROVA, V. I.: "Experimental study of new methods of growing poliomyelitis virus in tissue cultures." Acad Med Sci USSR. Inst for the Study of Poliomyelitis. Moscow, 1956. (Dissertation for the Degree of Candidate in Medical Science.)

Knishnaya Letopis'
No 32, 1956. Moscow.

VOROSHILOVA, M.K.; ZHEVANDROVA, V.I.

Methodological instructions on the preparation of basic ingredients
of culture media for in vitro tissue culture. 'ep.virus. 1 no.2:
52-53 Mr-Apr '56. (MLRA 10:1)

1. Institut po izucheniyu poliomielite AMN SSSR, Moskva.
(TISSUE CULTURE,
medium, prep. (Rus))

CHUMAKOV, M.P.; VOROSHILOVA, M.K.; KIRILLOV, A.G.; ZHEVANDROVA, Y.I.

Apparatus for rotating test tubes. Vop.virus. 1 no.2:53-55 Mr-Apr '56,
(MLRA 10:1)

(MICROBIOLOGY, apparatus and instruments,
appar. for rotation of test tubes (Rus))

VOROSHILOVA, M.K.; CHUMAKOV, M.P.; ZHEVANDROVA, V.I.; ZHAIMANZON, Ye.S.

Isolation and typing of 192 strains of poliomyelitis virus by means of tissue cultures. Vop.virus. 1 no.1:11-16 Ja-F '56. (MLBA 10:1)

1. Institut po izucheniyu poliomiellita AMN SSSR, Moskva.
(POLIOMYELITIS VIRUS, culture,
tissue culture, isolation & typing of 192 strains (Rus))
(TISSUE CULTURE,
cultivation of polio. virus, isolation & typing of 192
strains (Rus))

CHUMAKOV, M.P.; VOROSHILOVA, M.K.; ZHEVANDROVA, V.I.; MIRONOVA, L.L.;
ITSELIS, F.G.; ROBINZON, I.A.

Isolation and investigation of the fourth immunological type of
poliomyelitis virus, Vop.virus. 1 no.1:16-19 Ja-F '56. (MIRA 10:1)

1. Institut po izucheniin poliomiylita ANU SSSR, Moskva.
(POLIOMYELITIS VIRUS,
IV immunol. type, isolation (Rus))

ZHEVANDROVA, V.I.

Experimental evaluation of new methods for the laboratory investigation of the poliomyelitis virus using tissue culture. Vop.virus. 1 no.2: 43-47 Mr-Apr '56. (MLRA 10:1)

1. Institut po izucheniya poliomiellita AMN SSSR, Moskva.
(TISSUE CULTURE,
cultivation of polio. virus (Rus))
(POLIOMYELITIS VIRUS, culture,
tissue culture (Rus))

CHUMAKOV, M.P.; VOROSHILOVA, M.K.; DZAGUROV, S.G.; DROZDOV, S.G.;
LASHKEVICH, V.A.; MIRONOVA, L.L.; RAL'F, N.M.; SINYAK, K.M.;
BARTOSHEVICH, Ye.N.; VASIL'YEVA, K.A.; GAGARINA, A.V.;
GRACHEV, V.P.; ZHEVANDROVA, V.I.; TARANOVA, G.P.; KOROLEVA, G.A.;
KUKAYN, R.A.; ROBINZON, I.A.; TYUFANOV, A.V.; EL'BERT, L.B.

Results of mass immunization with live poliomyelitis vaccine
and the prospects for eradication of this disease. Vest.
AMN SSSR 18 no.6:5-15 '63. (MIRA 17:1)

VOROSHILOVA, Marina Konstantinovna; ZHEVANDROVA, Vera Ivanovna;
BALAYAN, Mikhail Surenovich; KARON, I.I., red.

[Methods for the laboratory diagnosis of enterovirus
infections] Metody laboratornoi diagnostiki enterovirus-
nykh infektsii. Moskva, Meditsina, 1964. 151 p.
(MIRA 18:2)

ZHEVANIK, V., inzh.; TOLCHINSKIY, I., inzh.

To lighten the work burden of confectioners. Obshchestv. pit.
no. 5:32-33 My '61. (MIRA 14:5)
(Confectionery)

PIVOVAROV, A.; KASATKIN, I., konstruktor, g. Yaroslavl'; UDODENKO, A.;
SAGUN, Ya.; ZHEVARIKHIN, I.

To you, party, we dedicate our work and creativeness. Sov.
profsoiuzy 17 no.16:28-29 Ag '61. (MIRA 14:7)

1. Sekretar' postoyanno deystvuyushchego proizvodstvennogo tsekha
No. 2, Leningrad (for Pivovarov). Instruktor orgmassovogo otdela
Omskogo oblsovprofa (for Udodenko. 3. Sekretar' Dorprofsozha
Yuzhnoy zheleznoy dorogi, Khar'kov for Sagun). 4. Predsedatel'
zavkoma Feodosiyskogo zavoda pos'yemnotransportnogo oborudovaniya
(for Shevarikhin).

(Socialist competition) (Trade unions)

S/121/62/000/004/002/008
D040/D113

AUTHORS: Rubinovich, B.Z. and Zhevelev, G.I.

TITLE: Accurate remote reading of displacements in heavy machine tools
using selsyns

PERIODICAL: Stanki i instrument, no. 4, 1962, 9-12

TEXT: Detailed description is given of a recently improved selsyn system used on the suspension remote-control board of a horizontal boring machine produced by the zavod Tyazhstankogidropress im. A.I. Yefremova (Tyazhstankogidropress Plant im. A.I. Yefremov) in Novosibirsk. Selsyns had been used by the plant since 1952 on such machines instead of the conventional optical and TV systems used on Soviet and foreign-make machines, because of the comparative simplicity and reliability of remote readings, but the indication error reached 0.08 mm for every 1000 mm that the machine elements moved. The described system, mounted on a machine with a boring spindle 250 mm in diameter, indicates the displacements of the slide (6 m travel) across the spindle axis, and of the spindle stock (4.5 m travel), the error being reduced to 0.03 mm per 1 m motion.

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Accurate remote reading of

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This degree of accuracy is sufficient for heavy machine parts. The accuracy is improved by introducing a correction mechanism that includes selsyn couples for rough and accurate readings, a rack-and-pinion transmission and a gear system. The correcting element is a cam with a zero circle 270 mm in diameter, and its protrusions are prepared using an optical reference rule. The manufacture of the cam is described, and the selsyn system illustrated. There are 6 figures and 1 table.

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ZHEVELEVA, G.I.

Case of diffuse hyperplastic periostitis. Ortop.travm. i protes.
17 no.6:99-100 H-D '56. (MLRA 10:2)

1. Iz Khar'kovskogo oblastnogo gosptalya (nachal'nik - A.I.Petrov)
dlya invalidov Otechestvennoy voyny.
(PERIOSTRUM--DISEASES)

ZHEVELEV, G.I.; LEBEDEV, G.A.

Cutting narrow grooves in multitrack heads of magnetic recorders.
Stan. 1 instr. 36 no.8:41 Ag '65. (MIRA 18:9)

VAVILOVA, Anastasiya Sergeyevna; ZHEVELEVA, Inna Semenovna; ZHUCHKOV, D.A., red.; AKIMOVA, A.G., red. izd-va; GORDEYEVA, L.P., tekhn. red.

[Electronic computers in foreign countries] Elektronnye vychislitel'nye mashiny za rubezhom. Pod red. D.A. Zhuchkova. Moskva, Mashgiz, 1962. 235 p. (MIRA 15:12)
(Electronic computers)

VAVILOVA, Anastasiya Sergeyevna; ZHEVTELEVA, Inna Semenovna; ZHUCHKOV,
D.A., red.; AKIMOVA, A.G., red., izd-va; EL'KIND, V.D., tekhn.
red.; GORDEYEVA, L.P., tekhn. red.

[Electronic computers abroad] Elektronnye vychislitel'nye ma-
shiny za rubeshom. Pod red. D.A.Zhuchkova. Moskva, Mashgiz,
1962. 235 p. (MIRA 16:8)

(Electronic computers)

FEDOTOV, Yakov Andreyevich; KULIKOVSKIY, A.A., redaktor; BERO, A.I.,
redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G., redaktor; MOZH-
ZHEVELOV, B.M., redaktor; SMIRNOV, A.D., redaktor; TARASOV, P.I.,
redaktor; TRAMM, B.F., redaktor; CHECHIK, P.O., redaktor;
SHASHMUR, V.I., redaktor.; LARIONOV, G.Ye., tekhnicheskiy redaktor

[Crystal triodes] Kristallicheskie triody, Moskva, Gos.energ.
izd-vo, 1955. 94 p. (Massovaya radiobiblioteka no.216)
(Electron tubes) (MLRA 8:9)

BERSHADSKIY, S.A., inzh.; ZAYTSEV, D.A., inzh.; ZHEVELYUK, E.M., inzh.

Temperature conditions of the cylinder-piston group of a
free-piston diesel compressor. Energomashinostroenie 11
no.5:10-13 My '65. (MIRA 18:6)

KALUZHENINA, K.F.; ZHEVERDYAYEV, O.N.; KHRUSLOV, V.K.

Changes in rubber structure occurring during the thermal
treatment in an aggressive medium. Kauch. i rez. 24 no.12:
17-18 '65. (MIRA 18:12)

1. Nauchno-issledovatel'skiy institut rosinovoy promyshlennosti.

ZHEVERZHEYEV, V. F.

Planets, Minor -(900)

Tables for the approximate calculation of absolute disturbances of small planets of the Hestia (900) group caused by Jupiter. Biul. Inst. teor. astron. 4 no. 5, 1949

9. Monthly List of Russian Accessions, Library of Congress, August 1952 ~~1993~~, Uncl.

BOZHENKO, A.S., prof., doktor tekhn.nauk; ZHIVNIZHNYI, V.F., dozent,
kand.fiziko-matem.nauk

Bending of triply connected profiles with polygonal sections.
Sbor.LIIZHT no.164:231-241 '59. (MIRA 13:8)
(Elastic rods and wires)

ORURK, IGOR' ALEKSEYEVICH, kand.tekhn.nauk, dotsent; ZHEVERZHEYEV,
SEVOLOD FEDOROVICH, kand.fiziko-matematicheskikh nauk,
dotsent

Determination of the parameters of linear systems using given
transient processes. Izv. vys. ucheb. zav.; elektromekh. 4
no.7:3-15 '61. (MIRA 14:7)

1. Kafedra osnov elektrotekhniki Leningradskogo instituta
inzhenerov zheleznodorozhnogo transporta (for Orurk).
2. Kafedra matematiki Leningradskogo instituta inzhenerov
zheleznodorozhnogo transporta (for Zheverzheyev).
(Automatic control)

ZHEVERZHEYEV, Vsevolod Fedorovich, kand. fiziko-matematicheskikh nauk,
dotsent

Approximate calculation of transfer functions using an imaginary
portion of the representation. Izv. vys. ucheb. zav.; elektromekh.
7 no.2:146-151 '64. (MIRA 17:4)

1. Kafedra matematiki Leningradskogo instituta inzhenerov
zheleznno-dorozhnogo transporta.

ZHEVERZHEYEV, V.F., kand.fiziko-matem. nauk, dotsent; ORURK, I.A.,
kand.tekhn.nauk, dotsent

Use of a least squares method for finding the originals of
complex images and determination of parameters of complex
systems. Sbor. trud LIIZHT no.179:96-106 '61. (MIRA 16:11)

ZHEVERZHEYEV V. F.

Jupiter (planet)-tables

Tables of the approximate calculation of absolute disturbances of small planets of the Hestia (900") group caused by Jupiter. Biul. Inst. teor. astron. 4 no. 8(61), 1950

9. Monthly List of Russian Accessions, Library of Congress, August 1952 ~~1953~~, Uncl.

ORURK, I.A.; ZHEVERZHEYEV, V.F.; ROZHCHIN, G.V.

Equivalent representation of a group of synchronous generators
joint by transmission lines with a single machine using the
conditions of the similarity of oscillations. Sbor. rab. po
vop. elektromekh. no.6:132-146 '61. (MIRA 14:9)
(Electric power distribution—Models) (Electric generators)

16,8000 (103,112,1132)

24078
S/144/61/000/007/001/003
D229/D303

AUTHORS: Orurk, I.A., Candidate of Technical Sciences, Docent,
and Zheverzheyev, V.F., Candidate of Physico-Mathema-
tical Sciences, Docent

TITLE: Determination of parameters of linear systems in
accordance with given transient processes

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Elektromekha-
nika, no. 7, 1961, 3 - 15

TEXT: A method of synthesis is considered, whereby a complex sys-
tem is replaced by an equivalent simpler one whose parameters are
determined. The dynamic parameters of the equivalent system are
determined in such a way that the functions which describe the two
(complex and simple) systems should differ as little as possible.
Such a method can be used in automatic control. Further, the equi-
valence criteria are given between a power aggregate and a group
of power generators which operate in parallel. The determination

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of the dynamic parameters is based on the similarity of characteristics in the two equivalent systems. A system of equations is set up for the complex system describing its behavior under small (linear) oscillations. This system is solved with respect to the $F(p)$ images of those variables which are involved in the equivalence of systems. For systems with lumped parameters:

$$F(p) = \frac{\sum_{k=0}^v g_k p^k}{\sum_{k=0}^w c_k p^k} \quad (1)$$

where $v \leq w$. $F(p)$ is approximated by a simpler image of the same physical magnitude, $\bar{F}(p) \approx F(p)$. The images $\bar{F}(p)$ belong to the equivalent simpler system,

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$$\bar{F}(p) = \frac{\sum_{k=0}^n s_k p^k}{\sum_{k=0}^n r_k p^k} \quad (2)$$

The parameters s_k and r_k are determined by the similarity of the characteristics corresponding to $F(p)$ and $\bar{F}(p)$, respectively. The phase-amplitude ($p = j\omega$) and real-argument ($p = \delta$) characteristics are used. By means of the Fourier integral and Mellin transform, the original function $f(t)$ is expressed in terms of the real-argument characteristic. In order that the error in determining the originals should be minimal, the method of least squares is applied to the characteristics. This leads to a non-linear relationship between the parameters r_k and s_k . To obtain r_k and s_k in the

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Determination of parameters ...

first approximation, the method of least squares is again used, yielding a system of equations, whose solution gives the sought-for dynamic parameters. The above method however (based on similarity of characteristics) does not ensure the necessary degree of stability. To provide for this, the characteristics approximation is combined with the construction of the stability region. Thus the method provides for the required quality factors of the transient process -- like the form of the curve, maxima and minima -- which constitute the numerator of the expression for the image, and for the degree of stability (the denominator of that expression). The equivalence criteria of an aggregate (to a group of power generators) are: a) The power parameters are equivalent; b) Two complex systems are equivalent if their parts are equivalent. Examples are given illustrating the use of the above method in optimization problems and in determining the parameters of power generators. There are 7 figures, 3 tables and 9 references: 7 Soviet-bloc and 2 non-Soviet-bloc. The reference to the English-language publication reads as follows: Brown, Cloues, Combination of Load-

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Determination of parameters ...

S/144/61/000/007/001/003
D229/D303

Flow and Stability-Equivalent, Power Apparatus and Systems, 1955,
no. 19.

ASSOCIATION: Kafedra osnov elektrotehniki Leningradskogo instituta inzhenerov zheleznodorozhnogo transporta (Leningrad Institute of Railroad Transportation Engineers, Department of Fundamentals of Electrotechnics) (I.A. Orurk); Kafedra matematiki Leningradskogo instituta inzhenerov zheleznodorozhnogo transporta (Leningrad Institute of Railroad Transportation Engineers, Department of Mathematics) (V.F. Zheverzheyev)

SUBMITTED: July 27, 1960

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L 34616-66 EWT(m)

ACC NR: AP6026569

SOURCE CODE: UR/0240/66/000/003/0064/0066

AUTHOR: Anokhin, V. L. (Moscow); Zheverzheeva, V. F. (Moscow)

ORG: none

TITLE: Extraction of radioisotope fragments from water by the foam-formation method

SOURCE: Gigiyena i sanitariya, no. 3, 1966, 64-66

TOPIC TAGS: radioisotope, water purification, water purification equipment, isotope separation, mechanical separation

ABSTRACT: Over 1,200 experiments were performed with Moscow tap water containing yttrium-91, cerium-144, strontium-90, cesium-134, ruthenium-106, iodine-131, circonium and niobium-95. The authors used a glass column 25-30 mm in diameter with a porous glass plate on the bottom to disperse the air blown through. The upper part of the column was bent downward to let out the foam produced. A solution of a precipitant and foaming agent was added to water containing a radioisotope and air was then blown through. The resultant foam gradually filled the top of the column, passed through the outlet, and was collected in a beaker, where it was tested. Aluminum hydroxide, calcium oxalate, etc. were used as precipitants. Gelatin, peptone, sulfanol B, and mixtures of these substances were the foaming agents. Completeness of extraction varied with the isotope, precipitant, and foaming agent used, but the results were sufficiently satisfactory for the authors to recommend the method of foam decontamination for use by itself or as an additional operation in conjunction with coagulation and sedimentation to accelerate the process and achieve a greater degree of decontamination. [JPRS: 36,455]

SUB CODE: 13, 18, 07 / SUBM DATE: 25Jul63 / ORIG REF: 003

Card 1/1 UDC: 614.777:[628.349:539.163]

ZHEVERZHEYEVA, V.F., kand.fizicheskikh nauk

Concentration of radioactive elements in the foam and surface layers of aqueous solutions. Gig.i san. 26 no.12:42-46 D '61.

(MIRA 15:9)

1. Iz Instituta obshchey i kommunal'noy gigiyeny imeni A.N. Sysina AMN SSSR.

(RADIOISOTOPES—ANALYSIS) (SOLUTIONS (CHEMISTRY))

ZHEVERZHEYEVA, V.F.

Determination of α -ray activity of solid residues of water
and soil. Gig. i san. 26 no.7:69-74 JI '61. (MIRA 15:6)

1. Iz Instituta obshchey i kommunal'noy gigiyeny imeni
A.N. Sysina AMN SSSR.

(RADIOACTIVITY—MEASUREMENT)
(WATER) (SOILS)

1. ZHEVERZHEEV, V. F.
2. USSR (600)
4. Comet, Faye's
7. Orbit of Faye's comet according to observations in 1932-1933 and 1939-1940, Biul. Inst. teor. astron. 5, no. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Unclassified.

ZHEVLAKOV, A.M.; MARKOV, V.M.

Tower car for inspection and repair of overhead contact network
of street railways. Rats. predl. na gor. elektrotransp. no.9:
65-66 '64. (MIRA 18:2)

1. Tramvayno-trolleybusnoye upravleniye Chelyabinska.

ZHEVLAKOV, A.M.; MARKOV, V.M.; OGURTSOV, V.V.

Storage room for fare boxes. Rats. predl. na gor. elektrotransp.
no.9:86-87 '64. (MIRA 18:2)

1. Tramvayno-trolleybusnoye upravleniye Chelyabinska.

ZHEVLAKOV, A. V.

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 7,
p 179 (USSR)

AUTHOR:

Zhevlakov, A. V.

TITLE:

Nature of the CO_2 of Carbonic Acid Ground Water
(K voprosu o prirode CO_2 uglekislykh podzemnykh vod)

PERIODICAL:

Sov. geologiya, sb. Nr 56, 1956, pp 134-136

ABSTRACT:

A. A. Smirnov [see abstract 1089 (1956)] considers the formation of CO_2 of carbonic acid waters to be the result of thermal diffusion of atmospheric gases in the zone of oxidation. He believes the partial degasification of the narzan mineral waters in winter, in areas devoid of a sedimentary covering layer, to be one of the proofs of the theory of diffusion. However, the CO_2 content in springs of the Mariánské-Lázně health resort (Czechoslovakia) is relatively constant throughout the year, despite the absence of

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15-57-7-9970

Nature of the CO₂ (Cont.)

a thick sedimentary cover. The difference in CO₂ content in the waters of the Krestovyy istochnik (spring) in 1951 and 1952 was 60 mg/liter, with a maximum annual temperature range of 18° C. (Total CO₂ content exceeded 2000 mg/liter.) Smirnov's assertion that high-mountain regions with a heavily dissected relief are more favorable to formation of CO₂ in ground water is also refuted. Carbonic acid springs in the Mariánské-Lázně area (Prameny, Farska Kiselka, and others) are located in only slightly incised ravines in the vicinity of watersheds.

Card 2/2

A. M. Baranovskiy

ZHEVLAKOV, A.V.

Mineral waters in Czechoslovakia. Sov. geol. 3 no.8:102-114 Ag '60.
(MIRA 13:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii
i inzhenernoy geologii.
(Czechoslovakia--Mineral waters)

ZHEVIAKOV, A.V.

Nature of CO₂ in underground carbonate waters. Sov.geol.no.56:134-136
'56. (MIRA 10:4)
(Carbon dioxide) (Water, Underground)

ZHEVLAKOV, K.A.

Solvability of alternating nil-rings. Sib.mat.zhur. 3 no.3:368-
377 My-Je '62. (MIRA 15:9)
(Rings (Algebra))

ZHEVLAKOV, P., inzh.

Experience in the organization of meat sections. Mias. ind. SSSR
29 no.1:46 '58. (MIRA 11:3)

1.Leningradskiy sel'skokhozyaystvennyy institut.
(Packing houses)

ZHEVLAKOV, P.K., Cand Tech Sci — (diss) " Study of processes of fodder mixing." Len, 1958. 17 pp (Len Agr Inst. Chair of Mechanization of Animal Husbandry Farms), 100 copies (KL, 24-58, 119)

ZHEVLAKOV, P.K.

From displays at the Paris Exhibition, Mekh. i elek. sots. sel'khoz,
16 no.3:57 '58. (MIRA 11:6)
(Paris--Agricultural machinery--Exhibitions)

ZHEVLAKOV, Pavel Kuz'mich, kand.tekhn.nauk; IOFINOV, Samuil Abramovich, prof.,
doktor tekhn.nauk; IUR'YM, Abram Bentsianovich, kand.tekhn.nauk;
TURBIN, Boris Grigor'yevich, kand.tekhn.nauk; CHAPSKIY, O.U., red.;
BARANOVA, L.G., tekhn.red.

[Farm mechanization and electrification; using machinery in plant
growing and stockbreeding]. Mekhanizatsiia i elektrifikatsiia
sel'skogo khoziaistva; mekhanizatsiia proizvodstvennykh protsessov
v rastenievodstve i zhivotnovodstve. [By] P.K.Zhevlakov i dr.
Leningrad, Gos.isd-vo sel'khoz.lit-ry, 1960. 552 p.

(NIRA 14:12)

(Farm mechanization)
(Electricity in agriculture)

ZHEVIAKOV, S.V., mayor meditsinskoy sluzhby

A portable splint for therapy and transportation on ships. Voen.med.
zhur. no.12:82 D '56. (MIRA 10:3)

(SPLINTS

portable for ther. and transportation on ships)

ZHEVLAKOV, V.A.

Using gypsum alumina and alumina cements in oil well drilling.
Trudy Giprovestoknefti no.1:292-299 '58. (MIRA 13:9)
(Oil well drilling fluids)

ZHEVLAKOV, V.A.

Possibility of producing plugging cements in the Kuybyshev
combine for building materials. Trudy KNII NP no.17:37-46
'62. (MIRA 17:8)

BELLER, N.N.; ZHEVLAKOV, V.A.

Is it practical to use hydrochloric baths in oil well cementing?
Neft. khoz. 38 no.11:30-33 N '60. (MIRA 14:4)
(Kuybyshev Province--Oil well cementing)

CHEPIKOV, A.K., kand.sel'skokhoz.nauk; MOCHALOVA, T.Ya., kand.sel'skokhoz.nauk;
MOCHALOV, V.V., starshiy nauchnyy sotrudnik; ZHEVLAKOV, V.V.,
agronom-pitomnikovod

Is the bacterial crown gall harmful? Zashch. rast. ot v'ed. i
bol. 6 no.3:17-18 Mr '61. (MIRA 15:6)
(Crown-gall disease)

ZHEVLAKOVA, Z.M.

Sorptive properties of the cerebral cortex in anesthesia. Biul. eksp.
biol. i med. 53 no. 4:71-74 Ap '62. (MIRA 15:4)

1. Iz kafedry fiziologii (zav. - prof. G.N.Sorokhtin) Khabarovskogo
meditsinskogo instituta. Predstavlena deystvitel'nym chlenom AN
SSSR V.V.Parinym.

(ANESTHESIA)

(CEREBRAL CORTEX)

(SORPTION)

L 27404-00 ENT11, SCIB DD
ACC NR AP6017002

AUTHOR: Zhevner, V. D.; Gusev, M. V.; Shestakov, S. V.

ORG: Biology-Soil Faculty, Moscow State University im. M. V. Lomonosov (Biologo-
pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta)

TITLE: Changes in the composition and pigment content of blue-green algae in relation
to the spectral composition of light and the intensity of illumination

SOURCE: AN SSSR. Mikrobiologiya, v. 34, no. 2, 1965, 209-215

TOPIC TAGS: algae, plant metabolism, chlorophyll, plant growth

ABSTRACT: In experiments on the blue-green algae *Nodularia* sp., *Anabaena*
variabilis, and *Haplosiphon fontinalis*, a reduction of the intensity of illum-
ination from 2,350 to 750 lux resulted in a higher rate of synthesis of pig-
ments of all three types contained in the algae: there were increases in the
chlorophylla, carotenoid, and bilichromoprotein content. Illumination with
light of specific spectral composition rather than white light resulted in
"chromatic adaptation" which affected mainly the content of bilichromoproteins
and of chlorophyll Q, and varied depending on the kind of light used and the
species of algae. The content of bilichromoproteins and of chlorophyll a and
the ratio between them in all three species were altered little on illumination
with yellow light, whereas the ratio between these two types of pigment changed

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UDC: 582.232.035.3

L 27404-06

ACC NR: AP6017702

substantially upon illumination with red or violet light. A constant pigment content, which did not change during further cultivation under changed conditions, was reached toward the end of the logarithmic phase of the first growth cycle of the algae. Orig. art. has: 3 figures and 3 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 22Jul64 / ORIG REF: 003 / OTH REF: 010

Card 2/2

STOLETOV, V.N.; ZHEVNER, V.D.; GARIBYAN, D.V.; SHESTAKOV, S.V.

Nitrosomethylurea induced pigment mutations in *Anacystis nidulans*.
Genetika no. 6:61-66 D '65 (MIRA 1961)

1. Moskovskiy gosudarstvennyy universitet, kafedra genetiki i
selektzii.

ZHEVNER, V.D.; GUSEV, M.V.; SHESTAKOV, S.V.

Change in the composition and content of pigments in blue-green
algae as related to the spectral composition of light and illu-
mination degree. Mikrobiologiya 34 no.2:209-215 Mr-Apr '65.

(MIRA 18:6)

1. Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo uni-
versiteta imeni Lomonosova.

ZHEVNERCHIK, A. [Zhaunerochyk, A.]; MIRONOV, I. [Mironau, I.]

[Working class of White Russia in the struggle to complete the socialist reconstruction of the national economy] Rabochy klas Belarusi u barats'be za saviarshenne satsyialistychnai rekonstruktsyi narodnai haspadarki. Minsk, Dziarzh.vyd-va BSSR, 1959. 115 p.

(White Russia--Economic policy)

(MIRA 13:8)

ZHEVNOVATYY, A. I.

ZHEVNOVATYY, A. I.: "Investigation of the process of carbonization of aluminate solutions in a continuous column." Leningrad, 1955. Min Nonferrous Metallurgy USSR. Glavalyuminiy (Main Administration of Aluminum). All-Union Aluminum-Magnesium Inst (VAMI). (Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Leteria No. 47, 19 November 1955. Moscow.

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CIA-RDP86-00513R002064720014-5"

ZHEVNOVATY, A.I.

Bank of hydrocyclones with step-by-step parallel pulp passage.
TSvet.net. 29 no.5:75-77 Ky '56. (MLRA 9:8)

1. Vsesoyuznyy alyuminiyevy-magniyevyy institut.
(Hydrometallurgy) (Metallurgical plants)

ZHEVNOVATYI, A.I., kandidat tekhnicheskikh nauk.

Investigating the process of calcinating aluminate solutions
in continuous-action columns. TSvet. met. 29 no.10:54-63
0 '56. (MLRA 9:12)

1. Vsesoyuznyy alyuminiyevo-magniyevyy institut.
(Aluminum--Metallurgy)

137-58-6-11917

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 105 (USSR)

AUTHOR: Zhevnovatyy, A.I.

TITLE: Methods of Rationalizing the Equipment and Process Procedures for Carburization of Aluminate Solutions (Puti ratsionalizatsii apparatury i tekhnologii protsessa karbonizatsii alyuminatnykh rastvorov)

PERIODICAL: Tr. Vses. alyumin.-magn. in-ta, 1957, Nr 39, pp 194-202

ABSTRACT: A description is presented of tests of pilot plant for continuous carburization of aluminate solutions. There are two pieces of equipment: a sieve column and a bubbling column. The former (150-mm diam), having sheet Fe screens with 5-mm holes 8 mm apart, was used for carburization prior to onset of precipitation of crystals of the hydroxide. The solution then proceeded to the bubbling column. A layer of foam was set up over the screens (still height 50 mm); the foam served primarily to absorb the carbon dioxide. In the bubbling column (diam 1000 mm), the gas was bubbled through a 250-mm layer, and the suspension was agitated intensively, thus keeping the crystals in a state of suspension. The experiments demonstrated the

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137-58-6-11917

Methods of Rationalizing (cont.)

possibility of cutting carburization time in half, reducing gas pressure to 400-mm H₂O instead of 1 atm in industrial installations, and conducting carburization by a continuous process without stirring equipment.

A.P.

1. Calcium aluminates--Carbonization
2. Industrial plants--Equipment
3. Industrial plants--Operation

Card 2/2

137-58-6-11925

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 106 (USSR)

AUTHORS: Katsenelenbogen, P.D., Zhevnovatyy, A.I.

TITLE: A Test of Hydrocyclones to Determine Their Applicability to the Thickening of Pulp in the Wet Grinding of Nepheline Sinter (Ispytaniye gidrotsiklonov s tsel'yu primeneniya dlya sgu-shcheniya pul'py mokrogo pomola nefelinovogo speka)

PERIODICAL: Tr. Vses. n.-i. alyumin.-magn. in-ta, 1957, Nr 40, pp 138-143

ABSTRACT: The results of tests conducted in 1949 at the Volkhov aluminum plant of a hydrocyclone (H) of 250-mm diameter and 38° cone taper intended to determine the possibility of its employment in thickening pulp in the wet grinding of nepheline sinter, are adduced. The experiments conducted show that an H may be used to thicken this pulp and extract a considerable amount of solids therefrom. However, the inadequate level of extraction of solids from the pulp with the screen system used and the imperfect H design (excessive cone taper) did not make possible its use as an equipment for the complete separation of the solid from the liquid phase. A battery of H with low cone

Card 1/2

137-58-6-11925

A Test of Hydrocyclones (cont.)

taper ($\sim 10^\circ$) may be expected to yield an increased extraction of solids. The experiments confirm the desirability of a second cleaning of the dregs. A sharp increase in the efficiency of H operation may be expected from coarser grinding of the sinter. The desirability of employing hydrocyclones in systems of agitation leaching of sinters is demonstrated.

N.P.

- | | | |
|-----------------------------------|---------------------------------|-------------|
| 1. Sintered nephelite--Processing | 2. Industrial plants--Equipment | 3. Machines |
| --Test results | | |

Card 2/2

137-58-6-11511

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 37 (USSR)

AUTHOR: Zhevnovatyy, A.I.

TITLE: Theoretical Foundation of the Process of Carbonization of Aluminate Solutions (Teoreticheskiye osnovy protsessy karbonizatsii aluminatnykh rastvorov)

PERIODICAL: Tr. Vses. n.-i. alumin.-magn. in-ta, 1957, Nr 40, pp 82-125

ABSTRACT: Three basic problems in the theory of the process of carbonization of aluminate solutions (AS) are studied: the fundamental chemical processes occurring in carbonization, the absorption of CO_2 by AS, and the formation of Al hydroxide crystals. A generalization of the literature data of various authors is advanced, along with experimental data obtained in a pilot plant with continuous carbonization in a column-type installation, in industrial carbonizers, and in laboratory equipment.

N.P.

1. Aluminate solutions--Carbonization 2. Aluminate solutions--Chemical reactions 3. Aluminate solutions--Absorptive properties 4. Aluminum hydroxide crystals--Growth

Card 1/1

ZHEVNOVATYY, A.I., kand. tekhn.nauk

Effect of main parameters on the performance of hydrocyclone-
thickeners. Khim.mash. no.2:13-17 Mr '62. (MIRA 15:3)
(Separators (Machines))

ZHEVNOVATYY, A.I.; VOLKOV, V.N.; PEVZNER, I.Z.; Primali uchastiye:
KRUK, O.P.; KRUTITSKIY, V.M.; KOL'TSOV, I.M.; TSVETKOV, F.A.

Effect of elastic ultrasonic waves on reducing the speed of
scale formation. TSvet. met. 35 no.3:48-53 Mr '62. (MIRA 15:4)

(Ultrasonic waves--Industrial applications)

ZHEVNOVATYY, A.I.; Prinsipali uchastiy: KHAZANOVA, I.V.; KUZNECHENKOV, I.G.;
CHUKHONTSEV, V.P.; SHENBERG, G.F.

Agitation flowsheet in the leaching of alumina-bearing calcine with
the use of hydrocyclones as main apparatuses for separating the pulp.
TSvet. met. 36 no.1:50-53 Ja '63. (MIRA 16:5)
(Leaching) (Alumina)

ZHEVNOVATYY, A.I., kand.tekhn.nauk

Thickening of suspensions by filtration without formation of
precipitates. Khim.mashinostr. no.5:16-19 S-0 '63. (MIRA 16:10)

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ZHEVNOVATYY, A.I.

Regularities in the filtering of a suspension flow without forming
a deposit. TSvet.met. 38 no.3:47-53 Mr 165.

(MIRA 18:6)

SOV/137-57-6-10912

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 6, p 216 (USSR)

AUTHOR: Zhevtunov, P.P.

TITLE: The Influence of Machining Upon the Hot Strength of Iron and Cast Carbon Steel Under Extreme Unilateral Heating (Thermal Shock)
[Vliyaniye mekhanicheskoy obrabotki na termicheskuyu stoykost' chuguna i litoy uglerodistoy stali pri rezkom odnostoronnnem nagreve (termicheskiy udar)]

PERIODICAL: V sb.: Tekhnologiya liteyn. proiz-va (MVTU, 45), Moscow, Mashgiz, 1955, pp 66-84

ABSTRACT: The heat source used to create thermal shock is molten iron (I), the temperature of which ranges between 1300 and 1350°C. Observations are conducted of the condition of the working surface of the specimen. The specimens are subjected to various types of machining (M), subsequent to which profilograms are taken. The investigations conducted make it possible to draw the following conclusions:
1) M affects the hot strength (HS) of I and steel; 2) the influence of HS on specimens of I is evidenced to a lesser degree than on steel;
3) failure of the specimens starts in the direction of scratches

Card 1/2

SOV/137-57-6-10912

The Influence of Machining Upon the Hot Strength of Iron (cont.)

resulting from M; 4) the coarser the M, the more pronounced is damage to the surface, damage being less evident in I; 5) cast specimens are comparable in HS to specimens subjected to coarse M; 6) milling results in higher HS than turning; 7) grinding increases the HS of I and steel; 8) heat treatment of I before M reduces HS relative to that of I that has not been heat treated. Preannealing of cast carbon steel prior to M reduces HS.

Yu. R.

Card 2/2

KOLYCHEV, Aleksandr Leonidovich; ZHERNOVKOV, Anatoliy Sergeyevich;
YABLOKOV, V.I., red.; MAL'KOVA, N.V., tekhn.red.

[Garage equipment; handbook] Garazhnoe oborudovanie; spravochnik. Moskva, Nauchno-tekhn.izd-vo M-va avtomobil'nogo transporta i shosseinykh dorog RSFSR, 1960, 182 p.

(MIRA 13:7)

(Garages--Equipment and supplies)

PHASE I BOOK EXPLOITATION 1155

Dubinin, Nikolay Petrovich; Gladilin, Anatoliy Nikolayevich;
Zhevtunov, Petr Prokhorovich; Krasavin, Vasilii Stepanovich;
Nazarov, Sergey Tikhonovich; Panchenko, Konstantin Petrovich;
Popov, Viktor Aleksandrovich; Popov, Yevgeniy Aleksandrovich;
Rastorguyev, Ivan Sergeyevich (deceased); Storozhev, Mikhail
Vasil'yevich

Tekhnologiya metallov (Technology of Metals) 3d ed., Moscow, Mashgiz,
1958. 564 p. 25,001 copies printed.

Ed.: Dubinin, N.P., Candidate of Technical Sciences; Ed. of
Publishing House: Shemshurina, Ye.A.; Tech. Eds: Uvarova, A.F.
and Model', B.I.; Managing Ed. for Literature on Metal Working
and Tool Making (Mashgiz): Beyzel'man, R.D., Engineer.

PURPOSE: This is a textbook for students taking courses in machine
design and manufacture at vtuzes.

Card 1/ 25

1155

Technology of Metals

COVERAGE: The book contains data on the structure and properties of metals and alloys, on nonmetallic materials, on methods of forming metals and alloys (casting, forging, stamping), on methods of machining metals and working nonmetallic materials, and on all types of metal-processing equipment. Authorship of the book is as follows: Part I, N.P. Dubinin; Part II, P.P. Zhevtunov; Part III, N.P. Dubinin; Part IV, M.V. Storozhev and Ye.A. Popov; Part V, S.T. Nazarov; Part VI, K.P. Panchenko, V.S. Krasavin, and A.N. Gladilin; Part VII, I.S. Rastogruyev (deceased) and V.A. Popov. All authors are Candidates of Technical Sciences, with the possible exception of Ye.A. Popov.

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