FIALKOV, Yu.Ya.

Effect produced by chemical interaction in binary systems on the
viscosity isotherms convex with respect to the composition axis.
Zhur.fiz.khim. 37 no.8:1757-1762 Ag '63.   (MIRA 16:9)

1. Kiyevskiy politekhnicheskiy institut.
                        (Systems (Chemistry))   (Viscosity)

L 18966-63   EPF(c)/EPR/EWP(j)/EWT(m)/BDS   Pc-4/Pr-4/Ps-4   RM/JW/MAT

ACCESSION NR: AP3006611   S/0076/63/037/009/1938/1943

AUTHOR: Fialkov, Yu. Ya.

TITLE: Analysis of irrational viscosity isotherms of binary systems

SOURCE: Zh. fizicheskoy khimii, v. 37, no. 9, 1963, 1938-1943

TOPIC TAGS: Irrational isotherm , viscosity isotherm , binary system

ABSTRACT: In an earlier paper, the author pointed out that the deviation (DELTAnu) of an experimental viscosity isotherm from the isotherm calculated on the assumption that no chemical reaction is taking place between the components of the system may serve as a useful means of identifying the composition of compounds in binary systems with irrational viscosity isotherms. Here he uses the method to interpret 2 groups of irrational viscosity isotherms, as exemplified by (group 1) a pyrrole-butyric acid systems and a methylene chloride-acetone system and (group 2) an m-toluidine-acetic acid system, a phenol-trichloracetic acid system, and a sulfuric acid-monochloracetic acid system. In many systems, differences in isotherm S values (=nu sub 1/nu sub 2) explain the thermal dis-

Card   1/2

L 18966-63

ACCESSION NR: AP3006611

placement of the maximum in irrational viscosity isotherms. Values calculated separately for each isotherm show that the DELTAnu sub max always corresponds to the same rational component ratio. The author suggests that irrational isotherms be divided into "irrational proper" and "pseudo-irrational" isotherms—the latter class comprising those for which the DELTAnu sub max matches the rational component ratio. Orig. art. has: 4 tables.

ASSOCIATION: Kievskiy politekhnicheskiy institut (Kiev Polytechnical Institute)

SUBMITTED: 14Feb61   DATE ACQ: 30Sep63   ENCL: 00

SUB CODE: CH, PH   NO REF SOV: 019   OTHER: 005

2/2

Card

FIALKOV, Yu.Ya.

Calculation of the viscosity isotherms of binary systems with noninter-
acting components. Part 2. Zhur.fiz.khim. 37 no.10:2149-2154 O '63.
(MIRA 17:2)

1. Kiyevskiy politekhnicheskiy institut.

FIALKOV, Yu.Ya.

Calculation of the viscosity isotherms of binary systems with noninteracting components. Zhur. fiz. khim. 37 no.11:2539-2542 N'63.   (MIRA 17:2)

1. Kiyevskiy politekhnicheskiy institut.

KUDRA, O.K.; ZHITOMIRSKIY, A.N.; FIALKOV, Yu.Ya.

  Electric transfer of ions in absolute sulfuric acid. Dokl. AN
  SSSR 151 no.2:377-379 Jl '63.   (MIRA 16:7)

  1. Kiyevskiy politekhnicheskiy institut. Predstavleno akademikom
  V.I.Spitsynym.
    (Ions—Migration and velocity) (Sulfuric acid)

FIALKOV, Yu.Ya.; SLONINA, V.S.; KARTAVOV, M.S.

Iodine exchange in iodine - iodate systems. Zhur.neorg.khim. 9 no.1:
214-216 Ja '64.
(MIRA 17:2)

1. Kiyevskiy politekhnicheskiy institut.

FIALKOV, Yu.Ya.; BOROVIKOV, Yu.Ya.

Relation between the constants of dissociation of acids in acetic acid and the properties of binary systems of the type acetic acid - acids. Ukr.khim.zhur. 30 no.2:119-125 '64. (MIRA 17:4)

1. Kiyevskiy politekhnicheskiy institut.

FIALKOV, Yu.Ya., kand. khim. nauk

Radiometric determining of potassium as a method of rapid analysis.
Khim. prom. no.4:68 O-D '64.   (MIRA 18:3)

MAKAROV, Yu.Yu.; [ILLEGIBLE], Yu.A.; [ILLEGIBLE], G.A.

Systems formed by nitric acid with heteroatic acids. Zhur. neorg.
khim. 9 no.8:1945-1950 Ag '64.

(MIRA 17:11)

1. Kiyevskiy politekhnicheskiy institut.

FIALKOV, Yu.Ya.; FENERLI, G.N.

Application of the volume properties in the physicochemical
analysis of the binary liquid systems. Zhur. neorg. khim. 9
no.9:2231-2238 S '64.   (MIRA 17:11)

1. Kiyevskiy politekhnicheskiy institut.

KUDRA, O.K.; FIALKOV, Yu.Ya.;ZHITOMIRSKIY, A.N.

Transference numbers in the systems formed by water with sulfuric
and orthophosphoric acids. Zhur. neorg. khim. 9 no.10:2454-2457
O '64.   (MIRA 17:12)

1. Kiyevskiy politekhnicheskiy institut i Institut khimii AN
Tadzhikskoy SSR.

KUDRA, O.K.; FIALKOV, Yu.Ya.; TARASENKO, Yu.A.

Physicochemical analysis of the systems trifluoroacetic
acid - indifferent solvent. Ukr. khim. zhur. 30 no.4:
347-353 '64.   (MIRA 17:6)

1. Kiyevskiy politekhnicheskiy institut.

PRIKHODCHENKO, V.G.; FIALKOV, Yu.Ya.; TRESKUNOVA, R.L.

Electrodeposition of extrasmall amounts of antimony on mercury.
Zhur.prikl.khim. 37 no.7:1466-1469 Jl '64.

(MIRA 18:4)

FIALKOV, Yu.Ya.; FENERLI, G.N.

Physicochemical analysis of binary liquid systems with exchange
reaction. Zhur. ob. khim. 34 no.10:3146-3153 O '64.

(MIRA 17:11)

1. Kiyevskiy politekhnicheskiy institut.

FIALKOV, Yu.Ya.; TARASENKO, Yu.A.; KUDRA, O.E.

Physicochemical analysis f binary systems formed with formic
acid and esters. Zhur. ob. khim. 34 no.12:3862-3866 D '64
                                              (MIRA 18:1)

L 33200-66   EWT(l)/EWT(m)   IJP(c)   GG
ACC NR: AR6016219

SOURCE CODE: UR/0058/65/000/011/E008/E008

AUTHOR: Fialkov, Yu. Ya.; Borovikov, Yu. Ya.

TITLE: Dielectric constant of certain binary systems with non-interacting components

SOURCE: Ref. zh. Fizika, Abs. 11E58

REF SOURCE: Vestn. Kiyevsk. politekhn. in-ta. Ser. khim. mashinostr. i tekhnol.,
no. 1, 1965, 73-79

TOPIC TAGS: dielectric constant, refractive index, liquid property, optic property

ABSTRACT: The authors investigated the dielectric constant ϵ, and also the density
and refractive index of 12 binary liquid systems made up of non-interacting com-
ponents. It is found that in systems made up of non-associated components good
agreement between the experimental values of ϵ and those calculated by the rule of
volume-fraction additivity is observed. In systems made up of weakly associated
components and non-associated components, the calculation of ϵ on the basis of the
calculation of the fluctuations of ϵ gives good agreement with experiment. [Trans-
lation of abstract]

SUB CODE: 20

Card 1/1

FIALKOV, Yu.Ya.; FENERLI, G.N.

Physicochemical analysis of binary liquid systems with exchange interaction. Part 2: Additive properties of model systems. Ukr. khim.zhur. 31 no.2:141-147 '65.

(MIRA 18:4)

1. Kiyevskiy politekhnicheskiy institut.

FIALKOV, Yu.Ya.; FENERLI, G.N.

Physicochemical analysis of binary liquid systems with exchange interaction. Part 3: Nonadditive properties of model systems. Ukr. khim. zhur. 31 no.3:258-263 '65.   (MIRA 18:4)

1. Kiyevskiy politekhnicheskiy institut.

FIALKOV, Yu.Ya.; ZHITOMIRSKIY, A.N.; KUDRA, O.K.

~...~~ort numbers in binary systems formed by sulfuric acid with orthophosphoric and monochloroacetic acids. Zhur.neorg. khim. 10 no.4:934-938 Ap '65.   (MIRA 18:6)

1. Kiyevskiy politekhnicheskiy institut i Institut khimii AN Tadzhikskoy SSR.

FIALKOV, Yu.Ya.; CHVIRUK, O.V.; KUDRA, O.K.

Physicochemical analysis of binary liquid systems formed by amines. Part 1: Systems diphenylamine-amines. Zhur. ob. khim. 35 no.9:1523-1529 S '65.

(MIRA 18:10)

1. Kiyevskiy politekhnicheskiy institut.

KRITONOV, N.G., PROTOPOPOV, A.N.

Transference numbers as a method of the physicochemical analysis of binary systems. Zhur. fiz. khim. 29 no.8: 1502-1924 Ag '55. (MIRA 18:9)

1. Ogarskiy politekhnicheskiy institut i Institut khimii AN Gruzinskoy SSR.

FIALKOV, Yu.Ya.; TARASENKO, Yu.A.

Effect of viscosity on electroconductivity in binary liquid
systems. Teoret. i eksper. khim. 1 no.4:473-478 '65.

(MIRA 18:10)

1. Kiyevskiy politekhnicheskiy institut.

FIALKOV, Yu.Ya.; TARASENKO, Yu.A.; FURER, O.X.

   Binary systems formed by the acyl complexes of stannic chloride
   with inert solvents. Zhur. neorg. khim. 10 no.1:231-235 Ja '65.
                                              (MIRA 18:11)

   1. Kiyevskiy politekhnicheskiy institut. Submitted Dec. 25, 1963.

POLAND

FIALKOVSKI, Konrad

Dept. of Computer Construction, Varsaw Polytechnic (Katedra
Budowy Maszyn Matematycznych, Politechnika Warszawska)

"Multiplication and division algorithms in two component binary code
with radix - 2."

L 13227-66   EWP(j)/EWA(c)   RM

ACC NR: AP6006038   SOURCE CODE: CZ/0053/65/014/004/0292/0292

AUTHOR: Elis, J.; Cerey, K.; Fialova, O.; Rybova, B.; Sechser, T.

ORG: Institute of Pharmacology, CSAV, Prague (Farmakologicky ustav CSAV)

TITLE: Effect of 6-azacytidine on pregnancy in mice [This paper was presented during the Twelfth Pharmacologic Days, Smolenice, 27 Jan 65.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 292

TOPIC TAGS: mouse, biologic reproduction, drug effect, pharmacology, heterocyclic base compound, organic nitrogen compound

ABSTRACT: Administration of 2 mg /Kg i.v. of 6-azacytidine to pregnant mice interfered with trophoblast, thus causing resorption of 88% of the embryos. Data on the dosage, times and intensity of effect are given. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 001

Card 1/1

BOROVIKOV, Yu.Ya.; FIALKOV, Yu.Ya.

Dielectric constant of some binary liquid systems with high
electric conductivity. Elektrokhimiia 1 no.9:1106-1109 S '65.
(MIRA 18:10)

1. Kiyevskiy politekhnicheskiy institut.

SHCHUKAREV, S.A.; BALICHEVA, T.G.; TARASENKO, Yu.A.; FIALKOV, Yu.Ya.

FIALKOV, Yu.Ya.; TSENDROVSKAYA, V.A.; KUDRA, O.K.

Temperature viscosity coefficients of binary systems. Ukr.
khim. zhur. 31 no. 12:1267-1275 '65   (MIRA 19:1)

1. Kiyevskiy politekhnicheskiy institut. Submitted February 24,
1964.

FIALKOV, Ye.Ya.; AKSENOVA, V.B.

Sulfur exchange in the system sulfide - sulfate. Zhur.neorg. khim. 11 no.1:215-216 Ja '66.   (MIRA 19:1)

1. Kiyevskiy politekhnicheskiy institut. Submitted April 9, 1965.

MAZDOROV, V.; FIALKOVA, V., redaktor.

[Inventorying materials in industrial enterprises] Uchet materialov
v promyshlennykh predpriiatiiakh. Moskva, Gosfinizdat, 1953. 67 p.
(V pomoshch' khoziaistvennomu aktivu predpriiatii).   (MLRA 7:3)
                                                        (Inventories)

KIRILLOV, I.A., prof.; BORODIN, S.V.,; VINOKUR, R.D.; VOSKRESENSKIY, A.A.;
GIROVSKIY, V.F.; ZHITOMIRSKIY, E.G.; SAFRAY, G.Ye.; SYCHEV, N.G.;
NIKITIN, N.D.; FILATOV, N.L.; FIALKOVA, V., red.; LEBEDEV, A.,
tekhn.red.

[Finances of branches of the national economy] Finansy otraslei
narodnogo khoziaistva. Avtorskii kollektiv pod rukovodstvom
I.A.Kirillova. Moskva, Gosfinizdat, 1958. 302 p. (MIRA 12:2)
(Finance)

JEDLICKA, J.; JAROSOVA, V.; FIALOVA, V.

Facotrs influencing the electrocardiogram in chronic pulmonary
heart disease. Acta Univ. Carol. [med.] (Praha) 10:suppl. 17:
71-78 '63

1. Kardiologicka laborator, II. interni klinika a II. chirur-
gicka klinika fakulty vseobecneho lekarstvi University Karlovy
v Praze.

FIALOVA, V.; JEZEK, V.; OUREDNIK, A.; KROUZKOVA, L.

The effect of hypoxemia and respiratory acidosis on the electro-
cardiogram in chronic cor pulmonale. Sborn. lek. 67 no.5:140-145
My'65.

1. II. interni klinika fakulty vseobecneho lekarstvi University
Karlovy v Praze a kardiologicka laborator fakulty vseobecneho
lekarstvi University Karlovy v Praze (prednosta: prof. dr. F. Herles,
DrSc.).

34439

9,4177 (1035, 1051)

S/185/61/006/006/019/030
D299/D304

AUTHOR: Fialkovs'ka, O.V.

TITLE: Infrared absorption-spectrum of germanium with iron
            impurities

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 6, no. 6, 1961,
            822 - 827

TEXT: The absorption spectra were studied of single crystals of
"pure" germanium, as well as of germanium with iron impurities, hav-
ing different (n and p)-type conductivity, over a large temperature
interval (473 to 20°K), in the 2.5 - 14 μ range (0.6 - 0.08 ev).
Mainly low-ohmic specimens of short lifetime were studied. The pre-
sence of the impurity (of the order of $4 \cdot 10^{13} - 10^{14}$ atom/cm^3)
was controlled by the changes in conductivity. In the absorption
spectrum of pure germanium, continuous absorption was observed. In
the absorption spectrum of n-type Ge (with Sb-impurity), no inten-
sive absorption bands could be observed at 293 and 20°K. In the ab-
sorption spectrum of p-type Ge (Fe impurity), at 293°K, an absorp-

Card (1/4)

Infrared absorption-spectrum of ...

S/185/61/006/006/019/030
D299/D304

tion band appeared at 4.6 μ (0.27 ev), as well as another, very broad, band at 2.9 μ (0.36 ev), having several weak maxima. A temperature drop from 293 to 20°K, led to a sharp change in the spectra -- the absorption band 4.6 μ disappeared completely, but a very strong absorption band appeared at 3.9 μ (0.32 ev). In order to ascertain the nature of the observed absorption bands, a number of investigations were carried out. It was found that lattice dislocations play no part in the observed phenomena. An investigation of absorption spectra of Ge with Ga-impurity (p-type), showed that the absorption band 3.9 μ appears also in this case, provided the Ga concentration is maximal. Further, the influence of annealing was studied on p-type Ge (with Fe-impurity). Repeated annealing of the specimen led to an increase in resistivity to 3.4 ohm∘cm, and to the disappearance of the 4.6 μ-band. The 3.9μ-band remained. Hence, the conclusion that the observed absorption bands are of a different nature. Further, the temperature dependence of the absorption spectra was studied. A lowering of temperature was accompanied by an unequal shift in the longwave- and shortwave sides of the absorption band -- namely, the shortwave side was shifted at a faster ra-

Card 2/4

Infrared absorption-spectrum of ...

S/185/61/006/006/019/030
D299/D304

te. The longwave band is investigated in more detail; it was found
to be of a complex nature, its behavior being non-monotonous with
respect to intensity as well as to shift in the absorption maximum.
This results is of interest, being obtained for the first time; it
is apparently related to 2 different transitions (near in frequency)
Further, the observed effects are interpreted from the point of view
of energyband theory. The 0.36 ev band can be interpreted as free-
carrier absorption, due to transitions inside the valence band. In-
troduction of Ga-impurities in Ge, leads to the formation of an ad-
ditional 0.01 ev level in the vicinity of the valence band. The ob-
served increase in absorption intensity at lower temperatures, is
due to a redistribution of holes. The author compares his results
to those obtained by Western investigators (Ref. 5: H. Briggs, R.
Fletcher, Phys. Rev., 87, 1130, 1952; 91, 1342, 1953); (Ref. 6: R.
Newman, Phys. Rev., 96, 1188, 1954). With respect to the 0.36 ev-
bands, the results were in agreement; the author however, observed
an additional band (0.32 ev). Above 100°K, it can be assumed that
absorption, due to electron transitions from the upper part of the
valence band, is superposed on hole-absorption. At 293°K, an absorp-

Card 3/4

Infrared absorption-spectrum of ...

S/185/61/006/006/019/030
D299/D304

tion band (0.27 ev) was observed, whose intensity depends on the heat treatment. This is in agreement with the results of other Soviet investigations. There are 6 figures and 6 references: 2 Soviet-bloc and 4 non-Soviet-bloc. The references to the English-language publications read as follows: W. Tyler, H. Woodbury, Phys. Rev. 96, 874, 1954; R. Newman, W. Tyler, Phys. Rev., 96, 882, 1954; H. Briggs R. Fletcher, Phys. Rev. 87, 1130, 1952; 91, 1342, 1953; R. Newman, Phys. Rev., 96, 1188, 1954.

ASSOCIATION: Instytut fizyky AS UkrRSR (Institute of Physics of the AS UkrRSR, Kyyiv)

Card 4/4

FIALKOVSKAYA, O.V. [Fialkovs'ka, O.V.]

Infrared absorption spectrum of germanium doped with iron.
Ukr.fiz.zhur. 6 no.6:822-827 N-D '61.

(MIRA 16:5)

1. Institut fiziki AN UkrSSR, Kiyev.
(Germanium—Spectra)

Ca.

3

The spectral distribution of the sensitivity of cuprous oxide photocells and their use for spectrometric measurements. O. Dalkovskaya. *Mem. phys. sérum* 4, 36 11 (1935). *Chem. Zentr.* 1936, II, 2101. Cuprous oxide photocells were prepd. by reduction in hot aq. glycerol solns. of varying concns. (20, 40, 60 and 100 drops glycerol per 100 cc. water). The spectral sensitivity of elements so prepd. varies and is optimum in the case of those prepd. with 60 drops of glycerol per 100 cc. water. On the curve for the optimal element the max. sensitivity is at about 5800 A.; when 100 drops of glycerol are used, the max. is shifted by 400-500 A. toward the infrared; with 40 drops max. sensitivity in the infrared region is even neg. A 2nd max. lies at about 7800 A. Because of such fluctuations in the sensitivity of the photoelements in various spectral regions, these elements cannot be used for photometric evaluation of sources of white light with different energy distributions. However, because of their high spectral sensitivity they are very convenient for work with monochromatic light in detg. absorption or other optical properties of materials.

M. G. Moore

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

Absorption spectra of neodymium solutions in ordinary and in distilled water. O. V. Fialkovskaya and S. M. Katchenkov. *J. Expl. Theoret. Phys.* (U. S. S. R.) 8, 288-90(1938).—When heavy water replaces ordinary water as solvent, the Nd^{+++} bands of $Nd_2(SO_4)_3$ solns. shift toward the violet. The shift is less at higher temps. by $\lambda = 4.9, 4.0, 7.35$ and 9.00 A. for the lines 3407, 3407, 3540, 4273 and 4755 A., resp. F. H. R.

PROCESSES AND PROPERTIES INDEX

SA

A 53

710. Absorption spectra and Fluorescence of heterocyclic Compounds. U. Y. Vialkovakaia. *Acta Physicochimica, U. S. PP. 215-234, 1938. In English.*—The absorption spectra and the fluorescence of heterocyclic compounds of pyridine, indol, furane, thiophene, chinolin and pyrrol in their vaporous state have been examined in a small interval of pressures, from about 10^{-3} mm. Hg and upwards. The first four substances exhibited characteristic absorption band spectra. The absorption spectrum of chinolin is somewhat more diffuse. Fluorescence has been detected only in indol and chinolin and represents a wide spectral region with marginal diffusion.

AUTHOR

METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES. METE
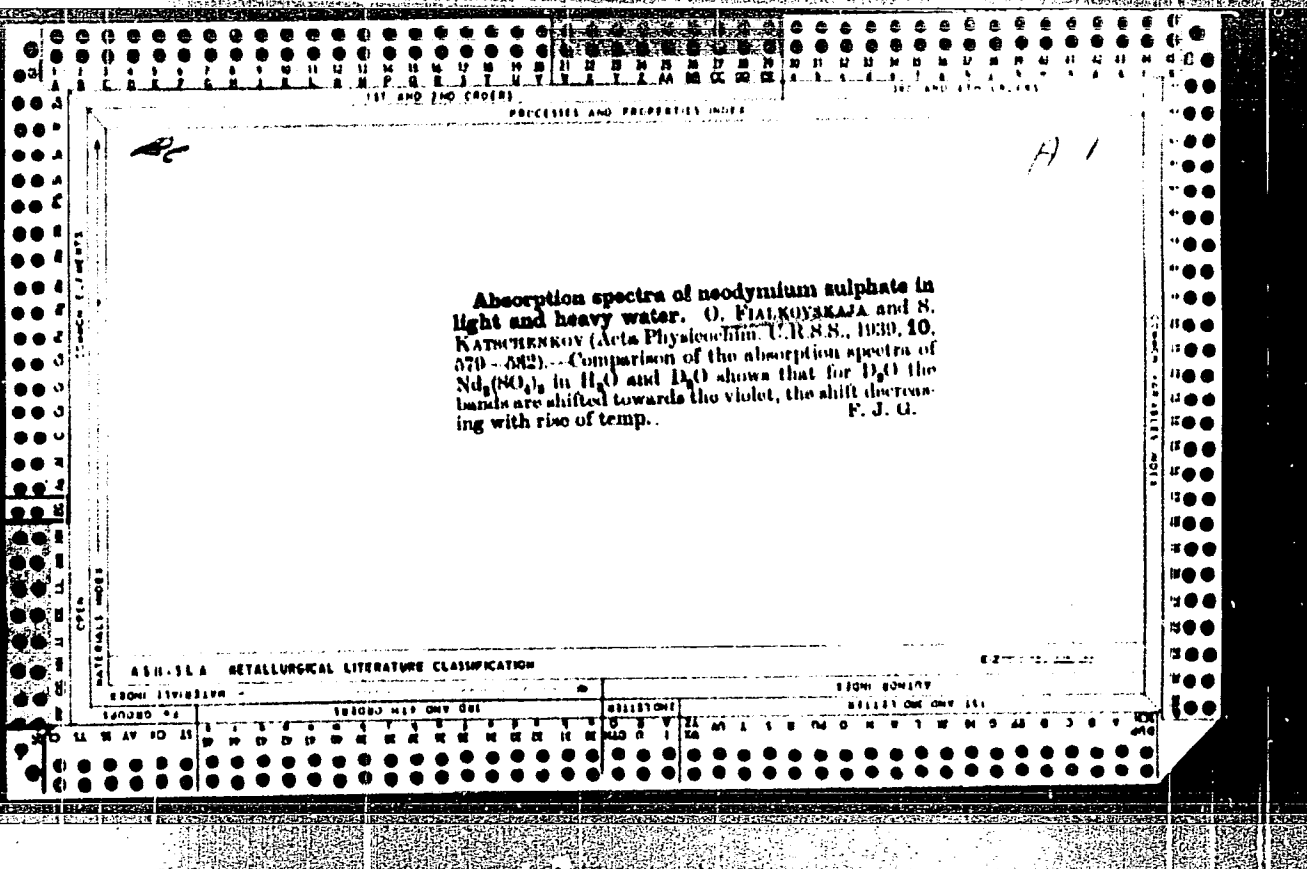
The absorption spectra and fluorescence of heterocyclic compounds. O. C. Fialkovskaya. J. Phys. Chem. (U. S. S. R.) 11, 451(1938). Pyridine, indole, thiophene and furan (all in vapor state) have narrow absorption lines besides the regions of complete absorption. Quinoline has somewhat obscured absorption bands, and pyrrole very likely has no narrow bands in the absorption spectrum, although this is still questionable. Among all these, fluorescence was observed only in the compds. that

have a benzene ring as a component of their structure, but even these compds. (indole and quinoline) have no discrete structure of the fluorescence spectrum, as has C₆H₆, but only one wide, rather diffuse band. Indole having narrow absorption bands, has more clearly indicated fluorescence than quinoline, which has a more diffuse absorption spectrum and less intensive fluorescence. Thus, the fluorescence presumably is due to the presence of a benzene ring in the structure of heterocyclic compds. Data are tabulated.

A. A. Podgorny

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Absorption spectra of neodymium sulphate in light and heavy water. O. FIALKOVSKAJA and S. KATSCHENKOV (Acta Physicochim. U.R.S.S., 1939, 10, 570-582).—Comparison of the absorption spectra of $Nd_2(SO_4)_3$ in H_2O and D_2O shows that for D_2O the bands are shifted towards the violet, the shift decreasing with rise of temp.. F. J. G.

PROCESSES AND PROPERTIES INDEX

535.372

4675. A new absorption band in alkali halide phosphors activated by thallium. PIALKOVSKAYA, O. V. *Dokl. Akad. Nauk, SSSR,* 60 (No. 1) 49–52 (1948) *In Russian.*—The addition of TlCl to KCl crystals leads to an absorption band at 2 475 Å which is due to TlCl and increases with its concentration, and also to a new band at 2 730 Å which is not detectable at 0·05 mol.% TlCl even in 5·0 mm layers and which is constant in intensity from 0·15–5 mol.% TlCl. This band, observed using 15 min exposures with a H lamp and a Leiss spectrograph, is insensitive to temp., shifting only 100 Å to the red at 500° C. The band is almost absent in polycrystalline samples. In measurements with a Beckmann spectrophotometer which requires a much reduced exposure of the sample to u.v. radiation the band is greatly reduced. It is suggested that electrons expelled by general u.v. light, as in the production of F-centres in pure KCl, are trapped by the Tl⁺ ions and that Tl atoms are responsible for the new band. In polycrystalline materials, surface irregularities compete for the electrons and less Tl atoms are formed. The band at 3 000 Å in the KBr + TlBr system is analogous. D. H. W.

METALLURGICAL LITERATURE CLASSIFICATION

Emission spectra of mixed alkali halide phosphors. V. Fialkovskaya (Leningrad State Univ.). *Doklady Akad. Nauk S.S.S.R.* 60, 575-8(1948); cf. *C.A.* 42, 6671d.—The phosphorescence spectra of TlCl-activated mix crystals of KCl + KBr, KCl + KI, KCl + RbCl, KCl + CsCl, were investigated in view of ascertaining the effects of varying the cations and anions of the matrix lattice, of variations of the lattice consts., and, in the case of KCl + CsCl, of mixing crystals with face-centered and body-centered lattices. The phosphors were prepd. by fusing finely ground and mixed equimol. amts. of the 2 salts, with 0.5 mol. % TlCl. Thus prepd., the KCl + KI + TlCl phosphor showed 2 emission max., identical with the max. of the simple KCl + TlCl and KI + TlCl; the analogous phosphor prepd. by simple mixing of the powders, without fusion, showed only one max., that of KI + TlCl, i.e., that of the salt with the greater lattice const. KCl + CsCl + TlCl shows very distinctly the max. of CsCl + TlCl and only a hint of the max. of KCl + CsCl; here, because of the great difference of the lattices of KCl and of CsCl, no regular mix crystal is obtained, even on fusion, and the activator is mainly concd. in the lattice with the greater const. In KCl + RbCl + TlCl, because of the relatively slight difference of the lattice consts. of KCl and RbCl, only one max. is observed, about half-way between the positions of the max. of the single KCl + TlCl and RbCl + TlCl; in this case, the activator evidently emits in an "averaged" field of the solid soln. KCl + RbCl. Similarly, KCl + KBr + TlCl shows one single max., in a position roughly half-way between the max. of KCl + TlCl and KBr + TlCl; the band shows some doublet structure, as does that of KBr + TlCl. The phosphorescence spectrum of a mix crystal thus provides a criterion permitting decision whether the given solid system forms a true mix crystal or only a polycryst. mixt.
V. Thon

TERENIN, A.N., akademik; FIALKOVSKAYA, O.V., starshiy nauchnyy sotrudnik.

Exchange of electrons between the adsorbed molecules and the catalyzer. Nauch.biul.Len.un. no.23:8-10 '49. (MLRA 10:4)

1. Fizicheskiy institut Leningradskogo ordena Lenina Gosudarstven-nogo universiteta.
(Electrons)

Absorption spectra of neodymium nitrate in different binary solvents. O. V. Fialkovskaya (A. A. Zhdanov State Univ., Leningrad). *Doklady Akad. Nauk S.S.S.R.* **74**, 409-72(1950).—The spectra were detd. in soln., 80 mg./cc., in H₂O, in mixts. of H₂O with 10, 40, 60, 80 wt. % MeOH, and in pure MeOH. With 10% MeOH, the spectrum is no different from that in H₂O, except for a slight shift of the 3467- and 3546-A. lines to the visible. With 40% MeOH, an addnl. new component appears, obviously due to MeOH; that component grows in intensity with increasing MeOH, while the H₂O components become increasingly weaker, disappearing almost completely at 80% MeOH. The MeOH component moves increasingly towards the visible and becomes increasingly broader with increasing MeOH. Similar effects are observed with H₂O-Me₂CO and with H₂O-dioxane mixts. This leads to the conclusion that the binary solvents behave not like true solns. but rather like emulsions, in the sense of the presence of distinct cybotactic groups of MeOH and of H₂O; some Nd⁺⁺⁺ ions are solvated with H₂O, others with MeOH, in a proportion depending on the compn. of the solvent. The wave-length shift, ΔA, towards the visible increases with the content of the nonaq. component, from 20% upwards; in the case of H₂O-dioxane, the rate of that shift shows a very steep increase at about 50%. In terms of the dielec. const. ε of the mixed solvent,

ΔA is proportional to $1/\varepsilon^2$ at low ε, i.e. at low H₂O contents, whereas with further increasing ε, i.e. increasing H₂O content, ΔA decreases rapidly and draws close to the axis of abscissas. Consequently, electrostatic interaction between Nd⁺⁺⁺ and the medium, in the sense of Debye's theory, plays a detg. role only at low H₂O contents, whereas in H₂O-rich solvents the situation is much more complex as a result of hydration. N. Thon

C. d.
1951

Photoreaction of pyridine in the adsorbed state. O. V. Fialkovskaya and A. N. Terenin (A. A. Zhdanov State Univ., Leningrad). *Izvest. Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1951, 230–41; cf. *C.A.* 44, 6721*h*, 7147*f*.— Pyridine adsorbed from the vapor *in vacuo* on dry outgassed granular silica gel, in an amt. well below that corresponding to complete coverage much less capillary condensation, exposed 2 hrs. to a Zn spark rich in ultraviolet (3000–2000 A.) showed no visible changes. On a plate of vitreous silica aerogel, 2 hrs.' exposure of the pyridine adsorbate produced a light-brown spot, which did not disappear on heating to 300° in vacuo. As the aerogel could not be heated above 150°, it is legitimate to assume that it did contain traces of O₂ and H₂O, and that the colored product formed under these conditions was identical with Freytag's (C.A. 27, 721; 32, 2809²) "photopyridine" (I) characterized by an absorption in the range 4000–3000 A. with max. at 3500 A. A different colored product is formed when pyridine is illuminated while adsorbed on silica gel contg. Tl⁺ ions, introduced by impregnating the silica gel with an ammoniacal soln. of TlCl (1 to 1% TlCl with respect to the silica); actual penetration of the Tl⁺ ions into the lattice of the silica gel (in addn. to inclusions of TlCl microcrystals, evidenced by x-rays) is demonstrated by the bright-blue fluorescence of the system in excitation with the Zn spark. Two hrs.' exposure of the SiO₂-TlCl system alone to a Zn spark produced no visible changes. However, with pyri-

dine vapor adsorbed prior to the exposure, a yellow spot appeared after 10-min. illumination and became very bright after 1 hr. The color disappears on mild warming with air of about 50°, but reappears with the original intensity on repeated illumination of the same spot. The same effects are observed with α-picoline, with the color appearing 2–4 times as fast as with pyridine. This yellow photoproduct (II) is formed in the absence of either O₂ or H₂O, and has a max. of absorption at 4250 A.; consequently, it is different from I. The yellow color II was obtained also, within 30 min., on illumination of an adsorbate of pyridine on a prepn. made by mixing still-hot silica gel (previously heated to 880°) with TlCl (1 TlCl:10 SiO₂ gel by wt.), and heating 4 hrs. to 300°, a method ensuring complete outgassing. The different natures of II and I follow also from the fact that II can be obtained only in the presence of TlCl. The yellow II is produced only on illumination with wave lengths shorter than 2558 A. That wave length corresponds to the max. of absorption of pyridine in CCl₄ soln., but also to max. absorption of thin layers of TlCl. That the photoreaction is detd. by absorption of light by pyridine only, and not by TlCl, is proved by the observation of the same threshold wave length with other Tl salts, with absorption spectra different from TlCl, namely, Tl₂SO₄, TlNO₃, and TlClO₄, the latter being transparent in that wave-length range. Consequently, the photoreaction producing II is due to absorption of light by pyridine, and requires the presence of Tl⁺ ions, no matter in what form they are introduced. The photoreaction still takes place if TlCl is strongly dild. by KCl, e.g. when the silica gel is mixed with a sublimate-phosphor KCl + 0.05% TlCl. On the other hand, there is no photoreaction with pyridine adsorbed on sublimed films of TlCl, not supported on silica gel; consequently, the reaction hinges on the presence of Tl⁺ ions distributed in the silica gel. The photoreaction was further observed, in the same spectral region, also with silica gel impregnated with ammoniacal solns. of PbCl₂, CdCl₂, and AgCl, which do not absorb in that region; to obtain the same d. of color, it was necessary to expose with PbCl₂ 4 times, and with CdCl₂ 10 times as long as with TlCl. With AgCl, blackening precedes the appearance of II, but remains const. after a while, whereas the intensity of the yellow color increases;

evidently, pptn. of metallic Ag takes place in the few individual microcrystals of AgCl, whereas the photoreaction which produces II occurs in ionic Ag⁺ centers which give rise to no blackening. Adsorbates of pyridine on films of ZnCl₂ and SnCl₄ on quartz gave no photoreaction, nor was a reaction observed with KCl, CsCl, BiCl₃, and AlCl₃. No reaction was found with adsorbates of pyridine on powders of MgO, TiO₂, ZnO, and PbO; the latter, evapd. in vacuo, had a yellow color of its own which disappeared after illumination of the pyridine adsorbate. That Cl has no part in the production of II is shown by the absence of an effect (other than darkening as a result of dissocn.) with a HgCl₂ film, in contrast to the weakly pos. reaction found on illumination of an adsorbate of pyridine on silica gel + Hg⁺⁺. Finally, illumination of the pyridine adsorbate on silica gel + AgCl with blue (instead of ultraviolet) light, while it did result in blackening (as in the absence of pyridine), gave no photoreaction II. The kinetic order of the photoreaction was estd. in the following way. With the same amt. of silica gel + TlCl, and with the amt. of pyridine admitted varied from 1 to 15, the time necessary to produce a spot of the same brightness varied from 90 to 6 min. Consequently, the product of time and concn. is approx. const., and the process is unimol., i.e. does not require the participation of a 2nd mol. of pyridine. The min. amt. of pyridine necessary for the appearance of II corresponds to coverage of about 0.1 sq m. out of a surface area of 300 sq m. g., this proves that the photoreaction involves only pyridine mols. adsorbed at the surface. Cooling to -180° of an adsorbate illuminated at room temp. resulted only in some weakening of the coloring effect, but not in its disappearance. Admission of gaseous NH₃ under 10 mm. resulted in immediate disappearance of the color; admission of air at room temp had no effect. The phenomenon of production of II consists evidently in a photoionization of the pyridine and transfer of the electron to the Tl⁺ (or other metal ion), which acts as electron acceptor and thus stabilizes the pos. pyridine ion II. In that respect, the phenomenon is analogous to the transfer of an electron from the hydrate H₂O to the metal ion in the

far-ultraviolet absorption of aq. salt solns. This view is borne out by the agreement of the observed order of effectiveness of the metal cations in the photoreaction II, and their order with respect to the position of the max. of far-ultraviolet absorption of their aq. solns.: Tl⁺ 214, Ag⁺ 210.5, Pb⁺⁺ 208.5, Cd⁺⁺ 180 mμ. It is further borne out by the observed ready occurrence of the photoreaction II on an adsorbate of pyridine on CeO₂ (powder) which is a very effective electron acceptor, as well as on silica gel impregnated with CeO₂. Freytag's (loc. cit.) interpretation of the nature of I as a product of hydrolysis of pyridine, or its interpretation by Feigl and Anger (C.A. 28, 2334⁹) as the NH₄ salt of that product, fails to account either for the necessity of the presence of O₂ or for the reversibility of the reaction. It appears plausible that I and II have a common origin, with the primary reaction consisting in both instances in the formation of a pos. pyridine ion. In the case of I, O₂ plays the role of the necessary electron acceptor. This primary reaction is followed and is complicated by partial reactions of oxidation and hydrolysis.

N. Thon

FIALKOVSKAYA, O.V.

Relation of Intensities of Spectral Emission Bands of Alkali- Halide Phosphors Activated by Thallium."

Vest Leningrad U, Ser Mat, Fix i Khim, No. 9, PP 111-119, 1952.

A description of expts to clarify influence of various factors characterizing the physical state of principal phosphor lattice on the spectral behavior of the activator inpregnated into its particles, c.f., disintegration of a single ctystal influences the emission spectrum of dislocations of the crystal lattice, which influen ce is manifested in the redistribution of the intensities among the emission bands; additional heating of diffused phosphor, thus ensuring deeper diffusion of activator into the lattice, reveals role played by depth ofdeposition of activactor, concentration; and, as noted for the first time here, temp not only influences widening and displacement of spectral bands but also causes certain changes in the relation of their intenseties.

252 T103

USSR/Physical Chemistry - Molecules. Chemical Bonds.

Abs Jour: Ref Zhur-Khimiya, No 5, 1957, 14386

Author : O. V. Fialkovskaya
Inst   : —
Title   : Absorption spectra of certain organic compounds adsorbed on potassium chloride

Orig Pub: Optika i spektroskopiya, 1956, 1, No 4, 595-597

Abstract: The closeness of the absorption spectra (AS) of benzene (I) and pyridine (II) adsorbed on KCl, to their AS in solid state at 180°C, as well as the reversibility of I ≠ II sorption and desorption and the facility of their displacement by ammonia point to the physical character of adsorption; the same is observed for α-picoline and chlorobenzene; whereas the character of the change in the aniline AS in adsorption on KCl and the latter's irreversibility are apparently dependent on the chemical nature of adsorption.

Card 1/1   Leningrad State Univ

FIALKOVSKAYA, O.V.

PRIKHOT'KO, A.F.

24(7)   p 3   PHASE I BOOK EXPLOITATION   SOV/1365

L'vov. Universytet

Materialy X Vsesoyuznogo soveshchaniya po spektroskopii. t. 1:
  Molekulyarnaya spektroskplya (Papers of the 10th All-Union
  Conference on Spectroscopy. Vol. 1: Molecular Spectroscopy)
  [L'vov] Izd-vo L'vovskogo univ-ta, 1957. 499 p. 4,000 copies
  printed. (Series: Its: Fizychnyy zbirnyk, vyp. 3/8/)

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po
  spektroskopii. Ed.: Jazer, S.L.; Tech. Ed.: Saranyuk, T.V.;
  Editorial Board: Landsberg, G.S., Academician (Resp. Ed., Deceased),
  Neporent, B.S., Doctor of Physical and Mathematical Sciences,
  Fabelinskiy, I.L., Doctor of Physical and Mathematical Sciences,
  Fabrikant, V.A., Doctor of Physical and Mathematical Sciences,
  Kornitskiy, V.G., Candidate of Technical Sciences, Rayskiy, S.M.,
  Candidate of Physical and Mathematical Sciences, Klimovskiy, L.K.,
  Candidate of Physical and Mathematical Sciences, Miliyanchuk, V.S.,
  Candidate of Physical and Mathematical Sciences, and Glauberman,
  A. Ye., Candidate of Physical and Mathematical Sciences.

Card 1/30

Card 11/30

FIALKOVSKAYA, O.V.

Infrared absorption spectra used for studying the processing
products of crude benzene, light fractions of shale casing-head
gasoline, and oils. Trudy kom. anal. khim. 8:236-242 '58.

(MIRA 11:8)

1. Institut fisiki Akademii nauk USSR.
(Petroleum products--Analysis)

AUTHOR: Fialkovskaya, O. V.   SOV/48-22-9-21/40

TITLE: Infrared Absorption and Heat Emission Spectra of Some
             Molecular Compounds in Different States of Aggregation
             (Infrakrasnyye spektry pogloshcheniya i teplovogo izlucheniya
             nekotorykh molekulyarnykh soyedineniy v razlichnykh
             agregatnykh sostoyaniyakh)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1958,
             Vol 22, Nr 9, pp 1093 - 1096 (USSR)

ABSTRACT: The author studied the infrared absorption spectra
             of naphthalene, of anthrazene and of phenantrene in
             the range of the fundamental intramolecular oscillations
             (700 - 1500 cm^{-1}) in different states of aggregation.
             This investigation was not limited to the ordinarily
             found states, the gaseous and the crystalline one, but
             also incorporated studies of solutions, of the molten,
             and the polycrystalline state at varying temperatures.
             This last type of experiment permitted to trace the
             process of the formation of new absorption lines which
Card 1/3   develop due to the aggregation of the molecules into a

Infrared Absorption and Heat Emission Spectra of Some   SOV/48-22-9-21/40
Molecular Compounds in Different States of Aggregation

crystal. Thus the nature of individual bands was
determined and the phenomenon of heat emission of
crystals was discovered. Natural and polarized light was
used in a temperature range of from -231 to + 220°.
The absorption spectra were all obtained under
completely identical experimental conditions and in
some cases even with the same layer thickness. A Perkin-
El'mer spectrometer Model 12C, was used. The systematic
occurrence of satellite lines in an almost equal and small
distance (24 cm^{-1}) from the ground lines of intra-
molecular absorption and their specific behaviour in
polarized light indicates that they are produced by
the interaction between the lattice vibrations and the
intramolecular oscillations. As regards the highly
polarized bands at 726 cm^{-1} (in the b-component) and
at 742 cm^{-1} (in the a-component) they are obviously
due to excitons. In the investigation of the absorption
spectra of the anthracene melt a heat radiation originating
from it was discovered (Fig 3). This spectrum consists
Card 2/3   of a number of emission lines the maxima of which coincide

Infrared Absorption and Heat Emission Spectra of Some   SOV/48-22-9-21/40
Molecular Compounds in Different States of Aggregation

with the maxima of the absorption bands in compliance
with Kirchhoff's law (Kirkhgoff). There are 3 figures, 1
table, and 4 references, 3 of which are Soviet.

ASSOCIATION: Institut fiziki Akademii nauk   USSR (Institute of
Physics, AS UkrSSR)

Card 3/3

24(7)
AUTHOR: Fialkovskaya, O. V.

SOV/48-23-1-12/36

TITLE: Thermal Radiation of Naphthalene, Anthracene and Phenan-
                 threne Within the Infrared Range of the Spectrum (Teplovoye
                 izlucheniye naftalina, antratsena i fenantrena v infrakrasnoy
                 oblasti spektra)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959,
                 Vol 23, Nr 1, pp 62 - 65 (USSR)

ABSTRACT: In studying the absorption spectrum of monomolecular
                 crystals at high temperatures the author detected thermal
                 radiation in a previous work (Ref 1). On the basis of a
                 number of maxima she assumed the presence of thermal radia-
                 tion within the infrared range of the spectrum. The radiation
                 and absorption spectra were photographed under equal con-
                 ditions. In investigating the thermal radiation only a
                 careful heat insulation was necessary. The investigation
                 covered the heat-radiation and absorption spectra of the
                 melt and crystal of anthracene at 20° and 200° (Fig 1),
                 those of the naphthacene melt at 90,110,115 and 135°(Fig 2)
Card 1/2   as well as those of the naphthalene melt at 90,100,120,160

Thermal Radiation of Naphthalene, Anthracene and Phenan-   SOV/48-23-1-12/36
threne Within the Infrared Range of the Spectrum

and 180° (Fig 3). In every substance bands were detected
which are characteristic of thermal radiation and correspond
to the thermal excitations of molecular oscillations. The
maxima appear, in accordance with Kirchhoff's law, at the
same wave lengths as those of absorption bands. The inten-
sities could not be compared to each other since the spectra
were photographed at different widths of slit. In addition,
the author investigated the influence of the layer thick-
ness (d=10,50 and 100μ) for naphthalene at 100° (Fig 4).
It may be seen from the figure that the intensities of the
individual bands increase with growing thickness. Finally,
it is stated that thermal radiation begins at 40-50° and is
suitable to the study of the natural vibration of the sub-
stances. Kopf. (Ref 2), the laboratory of the Academician
Terenin, Yaroslavskiy and Aleksandrov (Ref 3) are mentioned
as discoverers of similar kinds of thermal radiation.
                         There are 4 figures and 3 references,
2 of which are Soviet.

Card 2/2

Card 1/1

L 33583-66   EWT(m)/EWP(j)   RM

ACC NR: AR6016207

SOURCE CODE: UR/0058/65/000/011/D037/D037

AUTHOR: Fialkovskaya, O. V.

TITLE: Influence of deuterization on the vibrational absorption spectrum of naph-thalene

SOURCE: Ref. zh. Fizika, Abs. 11D291

REF SOURCE: Tr. Komis. po spektroskopii. AN SSSR, t. 3, vyp. 1, 1964, 67-69

TOPIC TAGS: naphthalene, deuterium, absorption spectrum, spectral analysis, crystal symmetry

ABSTRACT: A comparative analysis of the spectra of naphthalene $C_{10}H_8$ and octa-deuteronaphthalene $C_{10}D_8$ shows no change in the spectrum but only a change in the magnitude of the vibrational frequencies of the spectrum. Comparison of the spectra of naphthalene and monodeuteronaphthatlene $C_{10}H_7D$ has disclosed a whole number of singularities which apparently are the consequence of the difference in symmetry of the component molecules of the crystals. It is found that the vibrational spectra of a mixture of $C_{10}H_8$ and $C_{10}D_8$ crystals have the property that the spectra of the two components are additive. [Translation of abstract]

SUB CODE: 20

Card 1/1

FIALKOVSKAYA, O.V.

Infrared absorption spectrum of anthracene in polarized light for the three basal crystallographic faces at 20°K. Opt. i spektr. 17 no.3:397-401 S '64.   (MIRA 17:10)

NEFEDOV, A.V. [Nefedov, O.V.]; FIALKOVSKAYA, O.V. [Fialkovs'ka, O.V.]

Vibration spectrum of pyrene and its interpretation. Ukr. fiz. zhur.
10 no.4:416-419 Ap '65.   (MIRA 18:5)

1. Institut fiziki AN UkrSSR, Kiyev.

NEFEDOV, A.V. [Nefedov, O.V.]; FIALKOVSKAYA, O.V. [Fialkovs'ka, O.V.];

Interpretation of the vibrational spectrum of thiourea. Ukr.
fiz. zhur. 10 no.7:778-780 Jl '65.
(MIRA 18:8)

1. Institut fiziki AN UkrSSR, Kiyev.

NEFEDOV, A.V. [Nefedov, O.V.]; FIALKOVSKAYA, O.V. [Fialkovs'ka, O,V,]

Vibrational spectrum of an acenaphthene single crystal and its comparison with spectra of molecules of similar structure.
Ukr. fiz. zhur. 10 no.8:885-893 Ag '65.   (MIRA 18:8)

1. Institut fiziki AN UkrSSR, Kiyev.

FIALKOVSKAYA, R. P.

C

PROCESSES AND PROPERTIES INDEX

New method of manufacturing small caliber paraboloid reflectors. Z. I. BRONSHTEIN AND R. P. FIALKOVSKAYA. *Stekol'naya i Keram. Prom.*, 1946, No. 1-2, pp. 8-11. The method consists essentially in heating a glass disk in a cast-iron cup having a parabolic shaped bottom. The cup is heated to 250°C in an electric furnace and then removed, and the inside is coated by spraying with a clay suspension (kaolin passing through a sieve having 2500 openings per cm² and diluted to give 50 gm. clay per 150 cc. water) or by rubbing with lump graphite. The cup is then heated to 650° and removed, the glass disk is centered in the cup, and the cup is again heated to 650°. After 10 min. at 650° the furnace is cooled following the annealing curve for Four-cault glass of the given thickness. When the temperature reaches 300°, the reflector is removed and placed in a heated asbestos box. The glass disk is cut from high grade Fourcault glass which must be free of all defects that lower the optical and thermal properties of the reflector. The disk should not be thicker than 4 to 4.5 mm. and should be as close to the size of the reflector as possible (for a 250-mm. reflector, the disk was 272 mm.). The convex side of the reflector is ground to remove a layer of about 0.1 to 0.15 mm. and given a final polish. The graphite offers greater protection to the cup surface than does the clay suspension, but the former must be renewed every 5 to 6 days while the latter will last for 1.5 to 2 months of continuous operation of the cup. Reflectors made by this process had an average coefficient of reflection of 0.85, average focal distance of 100±1 mm., and aberration deviations up to 2 mm. The operations of silvering, coppering, and applying protective coatings remained the same. This process has proved successful in the manufacture of reflectors 250, 350, 400, and 450 mm. in diameter.

B. Z. K.

ASM-SLA   METALLURGICAL LITERATURE CLASSIFICATION

FIALKOVSKAYA, T., kand.tekhn.nauk

When an article is being painted...   Okhr.truda i sots.strakh.   3
no.3:65-67   Mr   '60.   (MIRA 13:7)
                    (Spray painting)

FIALKOVSKAYA, Tat'yana Andreyevna; SHIFMAN, Gerasim Moiseyevich; DENISOVA,
I.S., redaktor; KIRSANOVA, N.A., tekhnicheskiy redaktor

[Improving working conditions for paint sprayers in the machine
building industry] Ozdorovlenie uslovii truda pri pul'verizatsion-
noi okraske v mashinostroenii. [Moskva] Izd-vo VTsSPS Profizdat,
1954. 133 p.   (MLRA 8:7)
        (Spray painting) (Machinery industry)

FIALKOVSKAYA, T.; MASLOV, N.; DOROFEEV, L.

Ventilation of chambers used for motor-vehicle painting.
Avt.transp. 39 no.10:27-29 O '61.   (MIRA 14:10)
                (Motor vehicles—Painting)

AKSENOV, N.D., kand. tekhn. nauk; FIALKOVSKAYA, T.A., kand. tekhn. nauk, retsenzent; SARANTSEV, Yu.S., inzh., red.

[Labor safety in painting large objects] Okhrana truda pri okraske krupnogabaritnykh izdelii. Moskva, Mashinostroenie, 1965. 129 p. (MIRA 18:4)

FIALKOVSKAYA, Ye. A.

"Problems in Improving the Resistance of Wheat to Loose Smut",   UNIZR, Khar'kov, 1934.

1. FIALKCVSKAYA, YE. A.

2. USSR (600)

7. "Ways of Making Alfalfa Healthy with Respect to the Chief Airborne Diseases",
   Trudi Institutu Genetiki i Selektsii (Works of the Institute of Genetics and
   Selection), Vol 1, 1951, pp 151-180.

9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.

USSR / Plant Diseases. Diseases of Cultivated Plants.   0

Abs Jour   : Ref Zhur - Biologiya, No 22, 1958, No. 100562

Author   : Fialkovskaya, Ye. A.
Inst   : Ukrainian Scientific Research Institute of Plant Cultiva-
              tion, Selection and Genetics
Title   : Determination of the Resistance in Wheat Against Loose
              Smut During the Early Stages of Infection

Orig Pub   : Byul. Ukr. n.-i. in-ta rasteniyovodstva, selekts. i.
              genet., 1958, No 2, 117-120

Abstract   : On the basis of comparative data from 1954 and 1956 on
              account of spores which had germinated on the stigma of
              the flowers, and on the incidence of infection in the field
              in wheat varieties Lyutestsens 62, Odesskaya 13, Narodnaya,
              Gordeiforme 48 -2 and Timofeyev Triticum, the conclusion
              may be drawn that it is feasible to determine the resis-
              tance of these varieties to smut by the intensity of the

Card 1/2

Card 2/2

FIALKOVSKAYA, Ye.A. [Fialkovs'ka, O.O.]; SLADKOMEDOVA, A.I. [Sladkomedova, O.I.]; SHMATOVA, M.N.[Shmatova, M.M.]

Formation of the resistance to rust and smuts in winter and spring wheat hybrids. Trudy Inst. gen. i sel. AN URSR 5:56-62 '58.

(MIRA 11:9)

(Wheat--Disease and pest resistance) (Uredineae) (Smuts)

FIALKOWSKI, Stanislaw

Experimental studies of incorporation of autografts under the
influence of pharmacologically induced active hyperemia. Chir.
narzad. ruchu ortop. Pol. 28 no.7:851-853 '63

1. Z Kliniki Ortopedycznej 2 CSK Wojskowej Akademii Medycznej
w Warszawie (Kierownik: prof. dr. M. Garlicki).

FIALKOVSKIY, Aleksandr Makarovich,; FERBEROV, Leonid Yakovlevich,; KUZNETSOV,
K.K., otv. red.; SUROVA, V.A., red. izd-va,; SHKLYAR, S.Ya.,tekhn. red.

[Handbook of materials regulating the establishing of standards
for the determination of estimated costs of construction in the
coal industry] Spravochnik deistvuiushchikh normativnykh dokumentov
dlia opredeleniia smetnoi stoimosti stroitel'stva v ugol'noi
promyshlennosti. Moskva, Ugletekhizdat, 1958. 47 p.   (MIRA 11:12)
                         (Coal)
                 (Building--Estimates)

FIALKOVSKIY A.M.

AGALINA, M.S., inzh.; AKUTIN, T.K., inzh.; APRESOV, A.M., inzh.; ARISTOV,
        S.S., kand. tekhn. nauk,; BELOSTOTSKIY, O.B., inzh.; BERLIN, A.Ye,,inzh.;
        BESSKIY, K.A., inzh.; BLYUM, A.M., inzh.; BRAUN, I.V., inzh.; BRODSKIY,
        I.A., inzh.; BURAKAS, A.I.,inzh.; VAYNMAN, I.Z., inzh.; VARSHAVSKIY,
        I.N.,inzh.; VASIL'YEVA, A.A.,inzh.; VORONIN, S.A.,inzh.; VOYTSEKHOVSKIY,
        L,K., inzh.; VRUBLEVSKIY, A.A.,inzh.; GERSHMAN, S.G., inzh.;
        GOLUBYATNIKOV, G.A.,inzh.; GORLIN, M.Yu., inzh.; GRAMMATIKOV, A.N., inzh.;
        DASHEVSKIY, A.P.,inzh.;DIDKOVSKIY, I.L., inzh.; DOBROVOL'SKIY, N.L.,inzh.;
        DROZDOV, P.F.,kand. tekhn. nauk,; KOZLOVSKIY,A.A.,inzh.; KIRILENKO,
        V.G.,inzh.; KOPELYANSKIY, G.D.,kand. tekhn. nauk,; KORETSKIY, M.M.,inzh.;
        KUKHARCHUK, I.N.,inzh.; KUCHER, M.G.,inzh.; MERZLYAK, M.V.,inzh.;
        MIRONOV, V.V.,inzh.; NOVITSKIY, G.V.,inzh.; PADUN, N.M.,inzh.;
        PANKRAT'YEV, N.B., inzh.; PARKHOMENKO, V.I.,kand. biol. nauk,; PINSKIY,
        Ye.A.,inzh.; POILUBNYY, S.A., inzh.; PORAZHENKO, F.F.,inzh.; PUZANOV,
        I.G.,inzh.; REDIN, I.P.inzh.; REZNIK, I.S.,kand. tekhn. nauk,;
        ROGOVSKIY, L.V.,inzh.; RUDERMAN, A.G.,inzh.; RYBAL'SKIY, V.I.,inzh.;
        SADOVNIKOV, I.S.,inzh.; SEVER'YANOV, N.N.,kand. tekhn. nauk,; SEMESHKO,
        A.T.,inzh.; SIMKIN, A.Kh., inzh.: SURDUTOVICH, I.N.,inzh.; TROFIMOV,
        V.I.,inzh.; FEFER, M.M.,inzh.; FIALKOVSKIY, A.M.,inzh.; FRISHMAN,
        M.S., inzh.; CHERESHNEV, V.A., inzh.; SHESTOV, B.S., inzh.; SHIFMAN,
        M.I., inzh.; SHUMYATSKIY, A.F.,inzh.; SHCHERBAKOV, V.I.,inzh.;
        STANCHENKO, I.K., otv. red.: LISHIN, G.L.,inzh.,red.: KRAVTSOV,Ye.P.,
        inzh.,red.; GRIGOR'YEV, G.V.,red.; KAMINSKIY, D.N.,red.; KRASOVSKIY,
        I.P.,red.; LEYTMAN, L.Z., red.[deceased],; GUREVICH, M.S.,inzh.,red.;
        DANILEVSKIY, A.S.,inzh.,red.; DEMIN, A.M., inzh.,red.; KAGANOV,
        S.I.,inzh.,red.; KAUFMAN, B.N., kand. tekhn. nauk, red:.LISTOPADOV,
        N.P.,inzh.,red.; MENDELEVICH, I.R., inzh.,red.[deceased];
                                              (continued on next card)

AGALINA, M.S.... (continued) Card 2.

PEHTKOVSKIY, N.I.,inzh.,red.; ROZENBERG, B.M.,inzh.,red.; SLAVIN, D.S., inzh.,red.; FEDOROV, M.P.,inzh.,red.; TSYMBAL, A.V.,inzh.,red.; SMIRNOV, L.V., red. izd-va.; PROZOROVSKAYA, V.L., tekhn. red.

[Mining ; an encyclopedic handbook] Gornoe delo; entsiklopedicheskii spravochnik. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po ugol'noi' promyshl. Vol. 3.[Organization of planning; Construction of surface buildings and structures] Organizatsiia proektirovaniia; Stroitel'stvo zdanii i sooruzhenii na poverkhnosti shakht. 1958. 497 p. (MIRA 11:12)
(Mining engineering)
(Building)

LYUL'KO, Yefrem Vladimirovich; MONIN, Grigoriy Il'ich; FIALKOVSKIY,
    Aleksandr Makarovich; SANOVICH, P.O., otv.red.; CHEKHOVSKAYA,
    T.P., red.izd-va; PROZOROVSKAYA, V.L., tekhn.red.; SHKLYAR,
    S.Ya., tekhn.red.

[Standard practices for mine construction estimates] Smetnaia
dokumentatsiia dlia stroitel'stva shakht. Moskva, Gos.nauchno-
tekhn.izd-vo lit-ry po gornomu delu, 1960. 352 p.
            (Mining engineering)   (MIRA 13:9)

KUZNETSOV, K.K., inzh.; FIALKOVSKIY, A.M., inzh.

Simplfying documentation of estimates and costs for work completed. Shakht. stroi. 5 no.7:7-8 Jl '61.   (MIRA 15:6)

1. Vsesoyuznyy tsontral'nyy gosudarstvennyy institut po proyektirovaniyu i tekhniko-ekonomicheskim obosnovaniyam razvitiya ugol'noy promyshlennosti.
          (Mining industry and finanace—Accounting)

FIALKOVSKIY, A.T.

      Diffraction of plane electromagnetic waves on a slot and
on a tape. Radiotekh. i elektron. 11 no. 2:178-186 F '66
                                  (MIRA 19 :2)

1. Submitted October 9, 1964.

ACC NR: AP6018738

SOURCE CODE: UR/0057/66/036/006/1100/1108

AUTHOR: Fialkovskiy, A.T.

ORG: Institute of Physical Problems, AN SSSR, Moscow (Institut fizicheskikh problem AN SSSR)

TITLE: Open resonators formed by plane mirrors, with discontinuous impedance near the edges

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 6, 1966, 1100-1108

TOPIC TAGS: resonator, open resonator, resonator Q factor, electromagnetic wave reflection, electromagnetic wave diffraction, waveguide

ABSTRACT: The author employs the Wiener-Hopf method and approximation and factorization techniques discussed elsewhere by L. Vaynshteyn (ZhETF, 44, 3, 1050-1065, 1963) to calculate the reflection coefficient at a waveguide insert and at a discontinuity of the wall impedance of a waveguide, and to calculate the frequency spectrum and the Q-factors of the different modes of an open resonator of which each of the two mirrors is bordered by a band in which the surface impedance is altered or in which the plane of the reflecting surface is parallel to but not coincident with the plane of the main reflecting surface. The open resonator calculations are presented in some detail only for the two dimensional case in which one of the dimensions of the rectangular

Card   1/2

UDC: 538.56

L 41236-66

ACC NR: AP6018738

mirror is infinite. Calculations were performed for three dimensional resonators
with rectangular or circular mirrors; the results are discussed briefly, but the
calculations themselves are not adduced because of their complexity. It is shown
that bordering the mirrors with bands of altered impedance not only shifts the
resonant frequencies somewhat, but also considerably increases the Q-factors of some
of the modes and reduces the Q-factors of others. Under certain conditions the en-
hancement of the Q-factor can be very great, and it is suggested that open waveguides
with bordered reflecting walls may be useful for microwave transmission in the milli-
meter wavelength range. The author thanks L.A.Vaynshteyn for suggesting the problem
and for guidance. Orig. art. has: 40 formulas and 6 figures.

SUB CODE: 20,09/   SUBM DATE: 05Jul65 /   ORIG. REF: 004/ OTH REF: 003

Card 2/2 MLP

ACC NR: AP6018739   SOURCE CODE: UR/0057/66/036/006/1109/1114

AUTHOR: Fialkovskiy, A.T.

ORG: Institute of Physical Problems, AN SSSR, Moscow (Institut fizicheskikh problem) AN SSSR)

TITLE: Coupled oscillations of open resonators with plane mirrors and diffraction coupling

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 6, 1966, 1109-1114

TOPIC TAGS: resonator, open resonator, resonator Q factor, electromagnetic wave diffraction, coupled resonators

ABSTRACT: Mathematical techniques presented elsewhere by L.A.Vaynshteyn (ZhETF, 44, 3, 1050-1065, 1963) and in the preceding paper by the author (ZhTF, 34, 1100, 1966/ see Abstract AP6018738/) are employed to discuss the oscillations of two open resonators coupled by diffraction at a common mirror. The calculations are presented for the two-dimensional case in which the end mirrors of the two resonators occupy the planes $y = d_1$ and $y = d_2$ of a Cartesian coordinate system x, y, z, and the common mirror occupies the region $y = 0$, $-L < x < L$, but they can be generalized to the three-dimensional case of a rectangular or a circular mirror between two parallel planes. The effect of finite thickness (in the y-direction) of the common mirror is discussed. Formulas are given for the frequencies and Q-factors of the normal modes of the coupled resonators. There are coupled modes with high Q-factors. It is shown that by

Card 1/2   UDC: 538.56

L 41235-66

ACC NR: AP6018739

inserting a coupling mirror midway between the two mirrors of an open resonator, thereby forming a pair of coupled resonators, one increases the Q-factors of corresponding modes by a factor of 1.7. Finite thickness of the common mirror somewhat reduces the Q-factors and gives rise to additional modes, whose Q-factors, however, are low. The author thanks L.A.Vaynshteyn for suggesting the problem and for guidance. Orig. art. has: 25 formulas and 4 figures.

SUB CODE: 20 /   SUBM DATE: 05Jul65/   ORIG.REF: 004 /   OTH REF: 001

Card   2/2 mLP

L 09375--67   EWT(1)   GG

ACC NR: AP6023206   SOURCE CODE: UR/0020/66/168/006/1300/1302

AUTHOR: Fialkovskiy, A. T.   34

ORG: Institute of Physics Problems im. S. I. Vavilov, Academy of Sciences SSSR (Institut fizicheskikh problem Akademii nauk SSSR)

TITLE: Contribution to the theory of open resonators made up of parallel discs

SOURCE: AN SSSR. Doklady, v. 168, no. 6, 1966, 1300-1302

TOPIC TAGS: cavity resonator, resonator Q factor, electromagnetic wave reflection

ABSTRACT: The author considers resonators consisting of two discs facing each other and spaced a distance $2l$ apart, with $kl \geq 1$ ($k = \omega/c$ is the wave number). The calculations for such resonators are based on the assumption that the electromagnetic fields are reflected from their edges at frequencies close to cutoff, and that the reflection coefficient is the same as for the open end of a flat waveguide. The impedance boundary conditions on the periphery of the resonator are derived and it is shown that the behavior of such a resonator is not sensitive to the ratio of the disc diameter to the distance between discs, and that for each such ratio there exists a separate spectrum of high-Q oscillations. The amplitudes excited in the resonator are calculated for the case when a plane wave is incident on one of the discs in normal direction and the discs do not have high transparency. The author thanks L. A. Vaynshteyn for suggesting the topic and guidance. This report was presented by Academician V. A. Fok 16 October 1965. Orig. art. has: 2 figures and 16 formulas.

SUB CODE: 09, 20/ SUBM DATE: 28Sep65/   ORIG REF: 002

Card 1/1 LC   UDC: 621.373.413

FIALKOVSKIY, I.A.

ALFEROV, A.A.; ARTEMKIN, A.A.; ASHKENAZI, Ye.A.; VINOGRADOV, G.P.; GALEYEV,
A.U.; GRIGOR'YEV, A.N.; D'YACHENKO, P.Ye.; ZALIT, N.N.; ZAKHAROV,
P.M.; KOBNIN, N.P.; IVANOV, I.I.; IL'IN, I.P.; KMETIK, P.I.; KUDRYA-
SHOV, A.T.; LAPSHIN, F.A.; MOLYARCHUK, V.S.; PERTSOVSKIY, L.M.;
POGODIN, A.M.; RUDOY, M.L.; SAVIN, K.D.; SIMONOV, K.S.; SITKOVSKIY,
I.P.; SITNIK, M.D.; TETEREV, B.K.; TSETYRKIN, I.Ye.; TSUKANOV, P.P.;
SHADIKYAN, V.S.; ADELUNG, N.N., retsenzent; AFANAS'YEV, Ye.V, retsen-
zent; VLASOV, V.I., retsenzent; VOROB'YEV, I.Ye., retsenzent; VORO-
NOV, N.M., retsenzent; GRITCHENKO, V.A., retsenzent; ZHEREBIN, M.N.,
retsenzent; IVLIYEV, I.V., retsenzent; KAPORTSEV, N.V., retsenzent;
KOCHUROV, P.M., retsenzent; KRIVORUCHKO, N.Z., retsenzent; KUCHKO,
A.P., retsenzent; LOBANOV, V.V., retsenzent; MOROZOV, A.S., retsen-
zent; ORLOV, S.P., retsenzent; PAVLUSHKOV, E.D., retsenzent; POPOV,
A.N., retsenzent; PROKOF'YEV, P.F., retsenzent; RAKOV, V.A., retsen-
zent; SINEGUBOV, N.I., retsenzent; TERENIN, D.F., retsenzent; TIKHO-
MIROV, I.G., retsenzent; URBAN, I.V., retsenzent; FIALKOVSKIY, I.A.,
retsenzent; CHEPYZHEV, B.F., retsenzent; SHEBYAKIN, O.S., retsenzent,
SHCHERBAKOV, P.D., retsenzent; GARNYK, V.A., redaktor; LOMAGIN, N.A,
redaktor; MORDVINKIN, N.A., redaktor; NAUMOV, A.N., redaktor; POBE-
DIN, V.F., redaktor; RYAZANTSEV, B.S., redaktor; TVERSKOY, K.N.,
redaktor; CHEREVATYY, N.S., redaktor; ARSHINOV, I.M., redaktor;
BABELYAN, V.B., redaktor; BERNGARD, K.A., redaktor; VERSHINSKIY, S.V.,
redaktor; GAMBURG, Ye.Yu., redaktor; DERIBAS, A.T., redaktor;
DOMBROVSKIY, K.I., redaktor; KORNEYEV, A.I., redaktor; MIKHEYEV, A.P.,
redaktor

(Continued on next card)

ALPEROV, A.A. ---- (continued) Card 2.
    MOSKVIN, O.N., redaktor; RUBINSHTEYN, S.A., redaktor; TSYPIN, O.S.,
    redaktor; CHERNYAVSKIY, V.Ya., redaktor; CHERNYSHEV, V.I., redaktor;
    CHERNYSHEV, M.A., redaktor; SHADUR, L.A., redaktor; SHISHKIN, K.A.,
    redaktor

    [Railroad handbook] Spravochnaia knizhka zheleznodorozhnika, Izd.
    3-e, ispr. i dop. Pod obshchei red. V.A.Garnyka. Moskva, Gos.
    transp.zhel-dor. izd-vo, 1956. 1103 p.   (MLRA 9:10)

    1. Nauchno-tekhnicheskoye obshchestvo zheleznodorozhnogo transporta.
        (Railroads)

L 38735-66   T/EWP(1)   IJP(c)   CG/LH

ACC NR: AP6017912   (A)   SOURCE CODE: PO/0095/65/013/11-/0015/0022

AUTHOR: Fialkowski, K. R.—Fialkovskiy, K. R.   4 3

ORG: Department of Computing Machines, Technical University, Warsaw (Katedra budowy maszyn matematycznych, Politechnika)

TITLE: Properties and utilization of pseudosystematic weight codes

SOURCE: Polska akademia nauk. Bulletin. Serie des sciences techniques, v. 13, no. 11-12, 1965, 15-22

TOPIC TAGS: weight code, pseudosystematic weight code, binary code, digital computer, algorithm, arithemtic unit, adder, complement code

ABSTRACT: The author examines the properties of a class of weight codes which he terms pseudosystematic; it includes the conventional 2's complement code, the minus two code, and other codes. The article shows that the numbers represented in a pseudosystematic code of maximum length can be put in an arithmetic progression. The original article includes a diagram giving the properties of the pseudosystematic codes and a table listing pseudosystematic codes actually and by working computers. The author describes in detail the code which he terms the 2's complementary code (as distinct from the conventional 2's complementary code). Both have the same

Card 1/2

ACC NR: AP6017912

useful properties, and moreover, multiplication in the $\bar{2}$'s complement code is closed. The author presents and proves algorithms of arithmetic operations for the $\bar{2}$'s complement code. It follows from these algorithms that the complement adder of the conventional 2's complement code can be used to perform 2's complement additions. The arithmetic unit for the 2's complement does not need any supplementary shift equipment as compared to the unit in which the conventional 2's complement code is used. The article was presented by Y. Groszkowski on 29 August 1965. Orig. art. has: 26 formulas, 1 figure, 1 table. [GC]

SUB CODE: 09/ SUBM DATE: none/ ORIG REF: 008/ OTH REF: 005

Card 2/2

FIALKOVSKIY, N.K.; SKVARIK, V.P.

Heels made of glued wood. Leg.prom. 16 no.12:49 D '56. (MLRA 10:2)
(Kiev--Shoe industry)

AUTHOR: Fialkovskiy, P.G., Engineer   99-5-8/11

TITLE: Planning of Melioration Measures in the German Democratic
             Republic (Proyektirovaniye meliorativnykh meropriyatiy v
             Germanskoy Demokraticheskoy Respublike)

PERIODICAL: Gidrotekhnika i Melioratsiya, 1957, # 5, p 47-54 (USSR)

ABSTRACT: The methods of planning drainage systems in the German De-
             mocratic Republic differ in several points from those applied
             in the USSR. Perspective planning of melioration projects in
             the GDR is based on the entire territory of the state, and
             takes into consideration questions pertaining to hydro-economics,
             drainage, irrigation, water supply, erosion control, water-
             ways, fishing industry, etc. Deviating from the methods appli-
             ed in the USSR, perspective planning in the GDR is carried out
             in conjunction with field research with the aid of large-scale
             topographic and soil maps. The method of dividing the GDR
             into districts for the study of metereological and soil con-
             ditions is more practical than the method used in the USSR.
             Of considerable interest is the German method for establishing
             the relative profitableness of melioration projects, based on
             the relative value of grown crops to the nutritious value of
Card 1/2   cereals (by Berman and Abo). Drainage systems in the GDR differ

99-5-8/11

"Planning of Melioration Measures in the German Democratic Republic"

from systems in the USSR insofar, as they are shorter and of
less expensive materials. In addition, local economic con-
ditions are taken into consideration at their construction.
In the GDR mainly underground drainage systems of earthenware
(clay) pipes are used for heavy soils whereby no auxiliary
furrowing of the surface is required, a practice advocated for
the USSR. Tests conducted with mole drainage in Austria,
Switzerland, and England have shown good results, and further
experiments should be carried out regarding its durability and
possibility to combine this system with the system of underground
drain pipes. Effective drainage of swamps is accomplished in
the GDR with open ditches. Sluices are installed to raise the
water table during the vegetation period. Polders with 400-
450 hectars equipped with 1 pumping station each proved to be
economical, as well as smaller units (20-100 hectars), not
only in coastal regions but also in the valleys of large rivers
where regulation work would be too expensive.
The article contains 4 photographs, 1 diagram, and 1 figure.

AVAILABLE: Library of Congress

Card 2/2

F IALKOVSKIY, P.G.

AUTHOR: Fialkovskiy, P.G., Engineer   99-9-8/9

TITLE: "Sewage Irrigation in the German Democratic Republic" (Orosha-
niye: stochnymi vodami v germanskoy demokraticheskoy respublike)

PERIODICAL: "Gidrotekhnika i Melioratsiya", 1957, Nr 9, pp 53-56 (USSR)

ABSTRACT: The successful use of sewage for farming has developed into
a special branch of melioration in east Germany, whereby only
mechanical purification methods are being practiced. Best
results were obtained with periodic irrigation, using from 80
to 400 cu m of sewage per hectare. The year around irrigation
with an application of 15,000 - 30,000 cu m per hectare have
resulted in heavy leaching of K, Ca and N, concentration of P
and final sterility of the soil as soon as irrigation was
discontinued. Experience gathered in east Germany has shown
the high efficiency as well as the practicability of using
sewage without biological purification for agricultural purpo-
ses. The author recommends that plans be prepared for the
installation of sewage irrigation at all large cities of the
USSR. Movable sprinkling devices which are used in east
Germany are fit to be applied in the USSR on a large scale.
The article contains 2 photographs, and 2 figures.

Card 1/2

FIALKOVSKIY, P. G., Cand Tech Sci (diss) -- "Problems of designing a drying

system of agriculture". Moscow, 1959. 27 pp (Min Agric USSR, Moscow Inst

of Water Economy Engineers im V. R. Vil'yams), 300 copies (KL, No 9, 1960,

126)

30(1)
AUTHOR: Fialkovskiy, P.G., Engineer   SOV/99-59-11-9/15

TITLE: Methods of Calculating the Moisture Balance of Drainage Projects

PERIODICAL: Gidrotekhnika i melioratsiya., 1959, Nr 11, pp 38-46
               (USSR)

ABSTRACT: This article deals with methods of calculating the
               moisture balance of soil in drainage projects under
               various conditions. Several aspects of the problem
               and the many factors involved are discussed by the
               author, and a number of expressions for determining
               moisture balance derived. Basic to the author's
               approach to the problem is a quantitative analysis
               of moisture conditions in the project in order to
               obtain the necessary initial data and material for
               planning the project as well as checking the appro-
               priateness of measures taken after drainage. Re-
               ference is made to the following works: G.N. Kamen-
               skiy /Ref 5/ on calculation of the movement of
               soil moisture; A.I. Ivitskiy /Ref 4/ on the stu-
Card 1/2   dy of drainage norms; A.V. Lebedev /Ref 7/ who,
               utilizing Kamenskiy's work, developed a method of

SOV/99-59-11-9/15

Methods of Calculating the Moisture Balance of Drainage Projects

analysing soil moisture conditions in irrigated land, which, the author states, can also be used in connection with drainage projects; A.N. Kostyakov /Ref 6/ and L.T. Abramov / Ref 1 /on the theoretical calculation of the volume of flow of atmospheric precipitation falling on the project; A.N. Kostyakov, A.A. Cherkasov and A.M. Alpat'yev /Ref 3 /on a method of determining the amount of rated water consumption on irrigated lands. There are 2 graphs, 1 diagram and 7 Soviet references.

ASSOCIATION: Rosgiprovodkhoz

Card 2/2

FIALKOVSKIY, P.G., kand.tekhn.nauk

Methods for draining swampy mineral soils in the Far East. Gidr. i mel. 14 no.7:47-53 Jl '62.

(MIRA 17:2)

ZBARZH, Ya.M., prof.; MUKHIN, M.V., prof.; UVAROV, V.M., prof.;
KABAKOV, B.D., doktor med. nauk; ALEKSANDROV, N.M., dots.;
KLEMENTOV, A.V., dots.; FIALKOVSKIY, V.V., dots.;
MUKOVOZOV, I.N., kand. med. nauk; CHUPRINA, Yu.V., kand.
med. nauk; RYNKEVICH, V.S., red.; LEBEDEVA, G.T., tekhn.red.

[Operative maxillofacial surgery] Operativnaia cheliustno-
litsevaia khirurgiia. Leningrad, Medgiz, 1963. 358 p.

(FACE—SURGERY)   (JAWS—SURGERY) (NECK—SURGERY)   (MIRA 16:12)

FIALKOVSKIY, V. V.

Fialkovskiy, V. V. "On the problem of fixation of fragments of the lower maxilla during bone plastic," Trudy Leningr. obl. gospitalya dlya lecheniya invalidov Otechestv. voyny, Leningrad, 1948, p. 55-60

SO: U-3850, 16 June 53, (Letopis 'Zhurnal 'nykh Statey, No. 5, 1949)