

KUZNETSOVA, K.I.

Limits of vertical distribution of species of Lagenidae
in Jurassic sediments of the Volga Valley. Vop.
mikropaleont. no.6:107-115 '62. (MIRA 15:11)

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(Volga Valley--Lagenidae, Fossil)

KUZNETSOVA, K.I.; SHLEZINGER, A.Ye.

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(MIRA 16:9)

KUZNETSOVA, K.I.

Biometric study of the shell of *Margulina robusta* Reuss, a basic element of the complex of the *Epivirgatites nikitini* zone of the Moscow Basin. *Vop. mikropaleont.* no.7:105-126 '63.

(MIRA 17:10)

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VAKHRAMEYEV, V.A.; PEYVE, A.V., glavnyy red.; KUZNETSOVA, K.I., red.;
MENNER, V.V., red.; TIMOFYEV, P.P., red.

[Jurassic and Early Cretaceous floras of Eurasia and the
paleofloristic provinces of this period]. Iurskie i
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(MIRA 17:6)

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KORENEVA, Yelena Vasil'yevna; ZAKLINSKAYA, Ye.D., otv.red.; PEYVE,
A.V., glavnyy red.; KUZNETSOVA, K.I., red.; MENNER, V.V., red.;
TIMOFEYEV, P.P., red.

[Spores and pollen from the bottom sediments in the western
part of the Pacific Ocean.] Spory i pyl'tsa iz donnykh
otlozhenii zapadnoi chasti T'khogo okeana. Moskva, Izd-vo
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POSTEL'NIKOV, Ye.S.; ZATONSKIY, L.K.; AFREMOVA, R.A.; PEYVE, A.V., akademik,
glavnyy red.; PISHCHAROVSKIY, Yu.M., otv.red.; KUZNETSOVA, K.I., red.;
MENNER, V.V., red.; TIMOFEYEV, P.P., red.

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(Akademia nauk SSSR. Geologicheskii institut. Trudy, no.108)

(MIRA 18.1)

ZHURAVLEVA, Z.A.; SEMIKHATOV, M.A., otv. red.; PEYVE, A.V., glavnyy red.;
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and their stratigraphic importance.] Onkolity i katagrafii rifeya i
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KUZNETSOVA, K.I.

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1. Geologicheskii institut AN SSSR.

YAKOVLEV Nikolay Nikolavevich; PEYVE, A.V., akademik, glav. red.;
TIKHOMIROV, V.V., otv. red.; KUZNETSOVA, K.I., red.; MENNER,
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[Reminiscences of a geologist-paleontologist] Vospominania
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akademik, glavnyy red.; KUZNETSOVA, K.I., red.; MENNER, V.V., red.;
TIMOFEYEV, P.P., red.

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institut. Trudy, vol. 119) (MIRA 18:4)

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KUZNETSOVA, K.I., red.; MENNER, V.V., red.; TIMOFEYEV, P.P., red.

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KELLER, B.M., otv. red.; KUZNETSOVA, K.I., red.; MENNER, V.V.,
red.; TIMOFEYEV, P.P., red.

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GENDLER, V.Ye.; CHURIKOV, V.S.; YEREMIN, N.I.; KOGAN, B.S.; YAKOVLEVA,
M.N.; LANGE, O.K.; KABANOV, G.K.; KUZNETSOVA, K.I.; SINITSYNA, I.N.;
SMIRNOVA, T.N.; VENKATACHALAPATI, V.; MASLAKOVA, N.I.; BELOUSOVA, Z.D.;
YAKUBOVSKAYA, T.A.; YURINA, A.L.; RYBAKOVA, N.O.; MOROZOVA, V.G.;
BARASH, M.S.; FONAREV, V.I.; NIKONOV, A.A.

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Genezis i litologiya kontinental'nykh antropogenovykh otlo-
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[Stratigraphic importance of the Quaternary fauna of small
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melkikh mlekopitaiushchikh. Moskva, Nauka, 1965. 270 n.
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1. Akademiya nauk SSSR. Geologicheskii institut.

NIKIFOROVA, K.V., otv. red.; MEYVE, A.V., akademik, glav. red.;
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Korrelatsiia antropogenovykh otlozhenii Severnoi Evra-
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[Conophytens in the Riphean of the U.S.S.R. and their stratigraphic importance.] Konofitony rifeia SSSR i ikh stratigraficheskoe znachenie. Moskva, Nauka, 1965. 71 p. (Akademiia nauk SSSR, Geologicheskii institut. Trudy, no.131) (MIRA 18:9)

KRASHENINNIKOV, V.A.; SOLOV'YEVA, M.N., *otv. red.*; PEYVE, A.V., *akademik,*
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Mediterranean area.] Zonal'naya stratografiya paleogena
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(MIRA 18:8)

RAUZER-CHERNOUSOVA, D.M.; MENNER, V.V., *otv. red.*; PEYVE, A.V., *akademik, glavnyy red.*; KUZNETSOVA, K.I., *red.*; TIMOFEYEV, P.P., *red.*

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Inotseramy i stratigrafiia mela Tikhookeanskoi oblasti.
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VYSOTSKIY, Boris Petrovich; PEYVE, A.V., glav. red.; KUZNETSOVA,
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RATEYEV, M.A.; STRAKHOV, N.M., akademik, otv. red.; PEYVE, A.V., glavnyy red.; KUZNETSOVA, K.I., red.; MENNER, V.V., red.; TIMOFEYEV, P.P., red.

[Characteristics of the distribution and genesis of clay minerals in recent and old sea basins.] Zakonomernosti razmeshchenia i genezis glinistykh mineralov v sovremennykh i drevnikh morskikh basseinakh. Moskva, Nauka, 1964. 287 p. (Akademiia nauk SSSR, Geologicheskii institut. Trudy, no.1⁷). (MIRA 18:9)

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YAROSHENKO, Ol'ga Pavlovna; VAKHRAMEYEV, V.A., otv. red.; PEYVE, A.V., akademik, glavnyy red.; KUZNETSOVA, K.I., red.; MENNER, V.V., red.; TIMOFEYEV, P.P., red.

[Spores and pollen complexes of Jurassic and Lower Cretaceous deposits of the Northern Caucasus and their stratigraphic importance.] Sporovo-pyl'tsevye komplekсы iurskikh i nizhnemelovykh otlozhenii Severnogo Kavkaza i ikh stratigraficheskoe znachenie. Moskva, Nauka, 1965. 107 p. illus. (Akademiia nauk SSSR. Geologicheskii institut. Trudy, no.117) (MIRA 18:11)

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PKYVE, A.V., *akademik, glavnyy red.*; KUZNETSOVA, K.I., *red.*;
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[Role of facies-mineralogical analysis in the reconstruction
of the Quaternary climate; as revealed by a study made in
southern Moldavia and the southwestern Ukraine.] Rol'
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(MIRA 18:11)

KROPOTKIN, Petr Nikolayevich; SHAKHVANSTOVA, Kseniya Aleksandrovna;
PAVLOSKIY, Ye.V., otv. red.; PEYVE, A.V., akademik, glavnyy
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NEYBURG, Mariya Fridrikhovna [deceased]; MENNER, V.V., otv. red.;
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P.P., red.

[Permian flora of the Pechora Basin. Part 2: Sphenopsida.]
Permskaya flora Pechorskogo basseina. Moskva, Nauka. Pt. 2.
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LEBEDEV, Yevgeniy Leonidovich; VAKHRAMEYEV, V.A., otv. red.; PEYVE, A.V.,
akademik, glavnyy red.; KUZNETSOVA, K.I., red.; MENNER, V.V., red.;
TIMOFEYEV, P.P., red.

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- [Pleistocene in the European part of the U.S.S.R.; critical review of published data.] Pleistotsen Evropeiskoi chasti SSSR; kriticheskii obzor literaturnykh dannyykh. Moskva, Nauka, 1965. 179 p. (Akademiia nauk SSSR. Geologicheskii institut. Trudy, no. 123). (MIRA 18:12)

SHLEZINGER, A.Ye.; YANSHIN, A.L., akademik, otv. red.; PEYVE, A.V.,
akademik, glavnyy red.; KUZNETSOVA, K.I., red.; MENNER,
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218p. (Akademiya nauk SSSR. Geologicheskii institut.
Trudy, no.132) (MIRA 18:11)

CHUMAKOV, Ivan Sergeevich; SHANTSER, Ye.V., otv.red.; PEYVE, A.V.,
akademik, glavnyy red.; KUZNETSOVA, K.I., red.; MENNER,
V.V., red.; TIMOFEYEV, P.P., red.

[Cenozoic of the Rudnyy Altai.] Kainozoi Rudnogo Altaia.
Moskva, Nauka. 1965. 219p. (Akademiya nauk SSSR. Geologicheskii
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DEVYATKIN, Yevgeniy Viktorovich; NIKIFOROVA, K.V., otv. red.;
FEYVE, A.V., akademik, glavnyy red.; KUZNETSOVA, K.I., red.;
MENNER, V.V., red.; TIMOFEYEV, P.P., red.

[Cenozoic deposits and recent tectonics in the southeastern
Altai.] Kainozoiskie otlozhenia i neotektonika Iugo-
Vostochnogo Altaia. Moskva, Nauka, 1965. 242 p. (Akademia
nauk SSSR, Geologicheskii institut. Trudy, no.126)

(MIRA 18:9)

PAVLOVSKIY, Yevgeniy Vladimirovich; YESKIN, Andrey Stepanovich; SHTREYS,
N.A. otv. red.; PEYVE, A.V., glavnyy red.; KUZNETSOVA, K.I., red.;
MENNER, V.V., red.; TIMOFKYEY, P.P., red.

[Characteristics of the composition and structure of the
Archean of the Lake Baikal region]. Osobennosti sostava i
struktury Arkeia Pribaikal'ia. Moskva, Izd-vo "Nauka", 1964.
125 p. (Akademiia nauk SSSR. Geologicheskii institut. Trudy,
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(MIRA 17:7)

1. AN SSSR (for Peyve).

KUZNETSOVA, K.I.

Effect of the mechanical properties and the deformation rate on the failure of the schematic model of an inhomogenous medium and some real materials. Izv.AN SSSR. Ser.geofiz. no.12:1729-1748 '62. (MIRA 16:2)

1. Institut fiziki Zemli AN SSSR.
(Joints (Geology))

SHCHENNIKOV, S.T.; KUZNETSOVA, K.N., Vet.

Glebov Poultry Plant

"DDT in the fight against ectoparasites of poultry."

SO: Vet. 26 (4) 1949, p. 24

ACCESSION NR: AT4037664

S/2981/64/000/003/0227/0236

AUTHOR: Zakharov, Ye. D.; Yugova, V. V.; Kuznetsova, K. N.; Sadovnikova, L. N.

TITLE: Volume changes in semifinished products of alloy V 95 heat treatment

SOURCE: Alyminiyevy*ye splavy*, no. 3, 1964. Deformiruyemy*ye splavy* (Malleable alloys), 227-236

TOPIC TAGS: aluminum, aluminum alloy, alloy V 95, aluminum alloy heat treatment, aluminum alloy aging, aluminum alloy quenching, magnesium admixture, zinc admixture

ABSTRACT: Residual stresses in the material are the basic cause of distortion during machining. These stresses can be produced either by rapid cooling during quenching or by separation of phases from solid solution during aging, and can be alleviated in various ways, e.g., by a light pressing operation in the final die, by subjecting the part to a series of small plastic deformations alternating in sign, or by the method of thermal cycling. In technical aluminum alloys of complex composition, in which intermetallic phases precipitate during artificial aging, the change in specific volume has a complex character. In the present paper, the authors report on the volume changes in alloy V 95 during the process of aging as well as during repeated quenching. Since the lattice constant of Al

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depends on the amount and kind of admittures, the chemical composition was varied slightly (1.8 or 2.8% Mg, 5.0 or 7.0% Zn, 0 or 1.4% Cu, 0 or 0.35% Mn and 0 or 0.15% Cr). Graphs are presented showing the relative elongation of tested strips versus aging time from 1 to 120 hours at 140 or 160 C (for example, see Fig. 1 of the Enclosure). In tests with specimens containing 7.0% zinc, shrinkage was observed at both 140 and 160 C. The maximal strengthening of the alloy due to aging coincided with the time of maximal shrinkage, after which the length of the specimen practically returned to its initial value. Particularly large shrinkage (0.1%) was exhibited by alloys with Cr, Cu and 7.0% Zn. For parts in which distortion during the aging process is particularly undesirable, V95 alloy with 5.0% Zn is therefore recommended, the volume changes of which are considerably lower and of a monotonous character. With regard to the influence of repeated quenching, tests were conducted with two groups of specimens. Tests with the first group, which was annealed at 450 C for 48 hrs., showed that a slight elongation occurs after the first quenching. During subsequent aging, however, shrinkage takes place, and beginning with the second cycle, the length of the specimens decreases monotonously. Tests with the second group showed that during 13 repeated quenching procedures without consecutive aging, the dimensions of the specimens decreased uniformly in all directions after each quenching. The resultant shrinkage after 13 quenohings was 1.0 - 1.3%. The character of the observed

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shrinkage showed that this phenomenon is not related to processes of phase transformation. The authors recommend that repeated heat-treatment (if such is technologically required) be applied only to rough-machined details. "I. N. Sudzilovskaya, A. I. Dzevoyed and L. P. Tigina also took part in the experimental work." Orig. art. has: 9 figures.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 04Jun64

ENCL: 01

SUB CODE: MM

NO REF SOV: 001

OTHER: 002

Card 3/4

SESSION NR: AT4037664

Enclosure 01

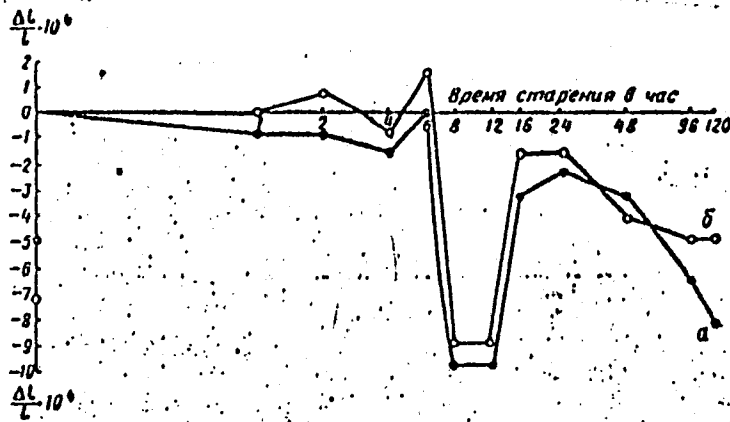


Fig. 1. Change in length of a pressed strip during aging at 140 C.

a - alloy 2V (Al + 1.4% Cu, 2.8% Mg, 0.35% Mn, 7.0% Zn and 0.15% Cr).

b - alloy 4V (Al + 1.4% Cu, 1.8% Mg, 0.35% Mn, 7.0% Zn and 0.15% Cr).

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L 29798-66 EWT(m)/EWP(t)/ETI IJP(e) JD/GD/JH

ACC NR: AT6016425 (A)

SOURCE CODE: UR/0000/65/000/000/0173/0178

(3)

AUTHORS: Zakharov, Ye. D.; Sorokin, N. A.; Kuznetsov, A. N.; Sinyavskiy, V. S.;
Gusev, V. P.; Kuznetsova, K. N.; Tsay, A. F.; Yegorova, L. S.

54
B+1

ORG: none

TITLE: Dependence of the stability of the solid solution in the alloy D16 on the chemical composition

SOURCE: AN SSSR. Institut metallurgii. Metallovedeniye legkikh splavov (Metallography of light alloys). Moscow, Izd-vo Nauka, 1965, 173-178

TOPIC TAGS: chemical composition, metal property,
 aluminum-containing alloy, solid solution, magnesium containing alloy, copper containing alloy, manganese containing alloy / D16 aluminum alloy

ABSTRACT: The stability of solid solution in D16 type aluminum alloys was studied as a function of the alloy composition. The stability of the solid solutions was determined by the method of step-wise tempering at 250, 300, 350, 400, and 450C for periods of 0.5, 1, 2, 3, 5, 7, 10, 20, and 60 min. After tempering, the specimens were naturally aged for a period of 10 days, then their electrical conductivity, strength limit, relative elongation, and flow limit were determined. The experimental results are shown graphically (see Fig. 1). On the basis of the experimental data C-curves for the stability of solid solution were constructed (see Fig. 2). The optimum alloy composition results from: less than 6% total copper

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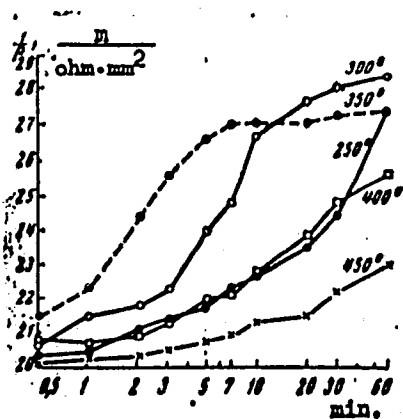


Fig. 1. Change in the electrical conductivity of alloy No. 1 (3.91% Cu; 1.2% Mg; 0.5% Mn) as a function of the duration of isothermal tempering at intermediate temperatures.

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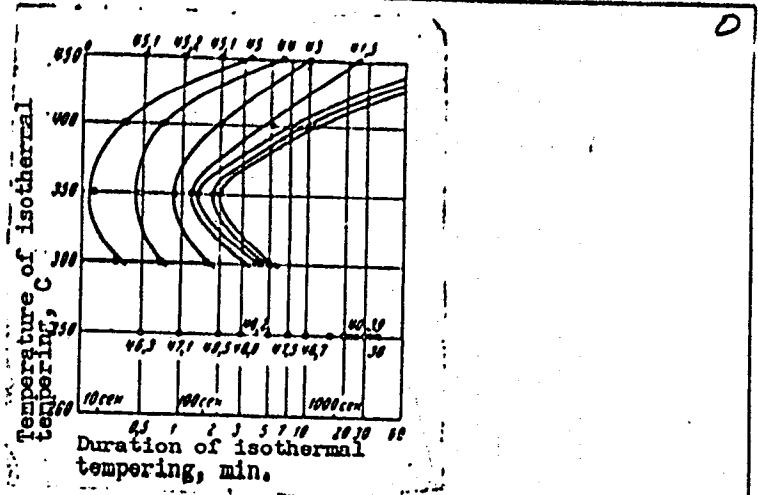


Fig. 2. C-type diagram for the stability of the solid solution in alloy No. 1, constructed from data for the change in the strength limit (for normal tempering $\sigma_f = 45.1 \text{ kg/mm}^2$).

and magnesium content for a total of less than 4.8% copper content. The manganese content should be less than 0.6%. Orig. art. has: 1 table and 5 figures.

SUB CODE: 11/ SUBM DATE: 16Sep65/ ORIG REF: 001/ OTH REF: 002

Card 3/3

ACCESSION NR: AT4037650

S/2981/64/000/003/0153/0158

AUTHOR: Khol'nova, V. I.; Dzevoyed, A. A.; Kuznetsova, K. N.; Yelagina, Z. A.

TITLE: Effect of various heat treatment procedures on the mechanical properties of alloy V93

SOURCE: Alyuminiyevy*ye splavy*, no. 3, 1964. Deformiruyemy*ye splavy* (Malleable alloys), 153-158

TOPIC TAGS: aluminum alloy, aluminum zinc magnesium alloy, alloy heat treatment, alloy aging, alloy mechanical property, alloy corrosion resistance, quenching medium, aging temperature, aging period, interrupted aging

ABSTRACT: Forgings 200 and 300 mm thick, from ingots (diameter 650 or 860 mm) of alloy V93 (1.03% Cu, 1.86% Mg, 0.30% Fe, 7.3% Zn, less than 0.01% Si, Al based), served as the source of samples quenched from $470 \pm 5C$ (25 min. in a niter bath) in cold or boiling (96C) water, as well as in cold and preheated (76C) oil. Interrupted aging involved 3 hrs. at 120C plus 4 hrs. at $165 \pm 5C$. Other samples were quenched in boiling water (94-96C) after 70 min. at $470 \pm 5C$, then aged in two stages: stage I at 100 or 120C, stage II at temperatures ranging by 5° intervals from 160 to 180C. Aging periods were 1, 2, 3, 4 and 5 hrs. at each temperature. Results indicate that quenching in hot water produces only

Card 1/2

ACCESSION NR: AT4037656

insignificant reductions in strength and this is deemed valuable in reducing stresses inside the piece. Best aging procedure from the standpoint of mechanical properties was at 100 plus 170C or 120 plus 170C, for 3 hour periods in each case. From the standpoint of corrosion resistance, aging for 3 hours at 120C plus 4 hours at 165 ± 5C was found to be optimal. Orig. art. has: 4 graphs and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

SUB CODE: MM

DATE ACQ: 04Jun64

NO REF SOV: 000

ENCL: 00

OTHER: 000

Card 2/2

ZAKHAROV, Ye.D.; YUGOVA, V.V.; KUZNETSOVA, K.N.; SADOVNIKOVA, L.N.;
Prinimali uchastiye: SUDZILOVSKAYA, I.N.; DZEVOYED, A.I.;
TIGINA, L.P.

Volumetric changes of semifinished products made of the B95
alloy in the process of heat treatment. Alum. splavy no.3:
227-236 '64. (MIRA 17:6)

KUZNETSOVA, K.S., nauchn. sotr.; RYBKINA, A.I., nauchn. sotr.
Prinimal uchastiye KRYZHIN, V.F.

[Centralization of the repair of equipment and labor productivity; using the example of machinery manufacturing] Tsentralizatsiia remonta oborudovaniia i proizvoditel'nost' truda; na primere mashinostroeniia. Moskva, Mashinostroenie, 1964. 130 p. (MIRA 17:8)

1. Moscow. Nauchno-issledovatel'skiy institut truda.
2. Nauchno-issledovatel'skiy 'stitut truda i zarabotnoy platy (for Kuznetsova, Rybkina).
3. Proyektnyy, tekhnologicheskii i nauchno-issledovatel'skiy institut Volgo-Vyatskogo sovnarkhoza (for Kryzhin).

16 hrs. 54 m. 1941. 1941. 1941. 1941.

5(3)

SOV/79-29-9-6/76

AUTHORS:

Volodkovich, S. D., Vol'fson, L. G., Kuznetsova, K. V.,
Mel'nikov, N. N.

TITLE:

From the Field of Organic Insectofungicides. XLIII. Synthesis
of α -Oxides by Oxidation of Polycyclic Halogen Derivatives
With Hydrogen Peroxide

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 9,
pp 2837 - 2839 (USSR)

ABSTRACT:

Since some of the cyclic α -oxides are strong agents against
insects and mold fungi, the authors oxidized some halogen
derivatives of polycyclic hydrocarbons. To obtain Dildrin
and Endrin it was first of all necessary to investigate the
oxidation of Aldrin and Isodrin. The two former compounds
were hitherto obtained solely by the oxidation of Aldrin
and Isodrin with organic hydroperoxides (Refs 3-6) or H_2O_2 in
the presence of pervanadic or pertungstic acid (Ref 7). To
obtain the corresponding oxides, the authors oxidized the
halogen derivatives of polycyclic hydrocarbons with 27-30%
hydrogen peroxide solution in 80-99% acetic acid solution;
almost all these halogen derivatives were transformed into

Card 1/2

From the Field of Organic Insectofungicides. XLIII. SOV/79-29-9-6/76
Synthesis of α -Oxides by Oxidation of Polycyclic Halogen Derivatives With
Hydrogen Peroxide

α -oxides in good yields. The following compounds recently synthesized by the authors were oxidized: 1,2,3,4-tetrachloro-10,10-difluoro-1,4,5,8-di-endomethylene-1,4,4a,5,8,8a-hexahydronaphthalene; 1,2-dichloro-3,4,10,10-tetrafluoro-1,4,5,8-di-endomethylene-1,4,4a,5,8,8a-hexahydronaphthalene; 1,2,3,4-tetrachloro-1,4,5,8-di-endomethylene-1,4,4a,5,8,8a-hexahydronaphthalene; 1,2,3,4,10-pentachloro-1,4,5,8-di-endomethylene-1,4,4a,5,8,8a-hexahydronaphthalene (Refs 8,9). α -Oxides were obtained from all of these compounds. Aside from Dieldrin and Endrin, none of the compounds synthesized by the authors are described in publications. It is interesting to note that the yield of α -oxide mainly depends on its water resistance (Table). The insecticide activity of the oxides runs in parallel with the activity of the initial products (of the unsaturated compounds). There are 1 table, 9 references, 6 of which are Soviet.

ASSOCIATION: Nauchnyy institut po udobreniyam i insectofungitsidam (Scientific Institute of Fertilizers and Insectofungicide Agents)

SUBMITTED: July 17, 1958
Card 2/2

MEL'NIKOV, N.N.; VOL'FSON, L.G.; KUZNETSOVA, K.V.; SAPOZHKOVA, Yu.N.;
GAR, K.A.; GRANIN, Ye.P.; FARBER, M.S.

Insecticides based on hexachlorocyclopentadiene. [Trudy] NIUIF
no.164:8-11 '59. (MIRA 15:5)
(Cyclopentadiene)

KUZNETSOVA, K.V., kandidat meditsinskikh nauk

Formation of resistant strains of Mycobacterium tuberculosis during larusan therapy and its concentration in the blood and tissues. Probl.tub. 34 no.2:58-60 Mr-Apr '56. (MLRA 9:8)

1. Iz sverdlovskogo oblastnogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. - prof. I.A.Shaklein, zam. dir. po nauchnoy chasti kandidat meditsinskikh nauk N.G.Butkin)

(TUBERCULOSIS, experimental,
eff. of larusal, form. of resist. strains (Rus))

USSR/Pharmacology and Toxicology. Chemotherapeutic Preparations
Antitubercular Drugs

V-7

Abs Jour : Ref Zhur - Biol., No 15, 1958, No 71297

Author : Kuznetsova K.V., Yegorova K.T.

Inst : -

Title : Concentration of Larusan in the Blood and Organs

Orig Pub : V sb.: Klinika i terapiya tuberkuleza i organizatisya
bor'by s nim. Sverdlovsk, 1957, 70-75

Abstract : The bacteriostatic concentration following a single administration of larusan (L) was determined according to Mekeyeva's method on 39 guinea pigs infected 2-4 weeks previous to experimentation with virulent tuberculous culture of human type in a dose of 0.05 . Bacteriostatic action of the blood manifests itself in its 1:40 dilution at a dose of 10 mg./kg. of L, in 1:80 at 50 mg/kg., and in 1:160 at 170 mg/kg; it disappears after 6, 8 and 48 hours respectively. In the daily administration of L during 10-15 days, no increase of bacteriostasis of the blood was observed. The content of L in the

Card : 1/2

USSR/Pharmacology and Toxicology. Chemotherapeutic Preparations
Antitubercular Drugs

V-7

Abs Jour : Ref Zhur - Biol., No 15, 1958, No 71297

organs is proportionate to the introduced dose. In the daily introduction of L, bacteriostasis of the organs decreases. The content of L in the blood was determined in 67 patients affected with pulmonary tuberculosis. The administration of 0.1-0.3 g. of L per os produces a proportionate bacteriostatic activity of the blood after 1 hour. Treatment with 3 divided daily doses of 0.6 and 0.9 g. assures around-the-clock bacteriostatic concentration of L in the blood which, after a 12 hour interval, is equal to 0.6-0.8 γ /ml.
-- G.F. Sivashinskaya

Card : 2/2

KUZNETSOVA, K.V., kand. med. nauk; CHERNIGOVSKAYA, N.N., kand.med. nauk

Characteristics of Mycobacterium tuberculosis strains in repeated diagnosis. Probl. tub. 41 no.9:57-61 '63 (MIRA 17:4)

1. Iz Sverdlovskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. - prof. I.A. Shaklein, nauchnyy rukovoditel' - kand. med. nauk N.G.Butkin).

KUZNETSOVA, K.V., kand.med.nauk; CHERNIGOVSKAYA, N.N.; UDILOVA, N.N.

Possibility of a therapeutic effect of phthivazid on experimental tuberculosis caused by a resistant strain. Probl. tub. 41 no.8: 62-66 '63. (MIRA 17:9)

1. Iz Sverdlovskogo nauchno-issledovatel'skogo instituta tuberkuleza (dir. - prof. I.A.Shaklein) Ministerstva zdravookhraneniya RSFSR.

BELIKOVA, H.A.; VOL'YSON, L.G.; KUZNETSOVA, K.V.; MEL'NIKOV, N.N.
PERSON, A.I.; PLATE, A.F.; PRYANISHNIKOVA, M.A.

Preparation of aldrin and dieldrin. Zhur.prikl.khim. 33 no.2:
454-463 F '60. (MIRA 13:5)
(Aldrin) (Dieldrin)

ANISIMOV, A.A.; KUZNETSOVA, L.A.; DUBOVSKAYA, I.S.; LIKHOVIDOVA, Ye.V.

Flow of assimilates during the infiltration of osmotically active substances into leaves. Fiziol. rast. 9 no.1:16-20 '62.
(MIRA 15:3)

1. Gorky State University.
(Plants, Motion of fluids in) (Leaves)

DEVYATNIN, V.A.; SOLUNINA, I.A.; KUZNETSOVA, L.A.

Adsorption method for determining ergocalciferol in irradiated ergosterol solutions. Med.prom. 16 no.4:30-33 Ap '62. (MIRA 15:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(ERGOSTEROL) (ERGO-CALCIFEROL)

KUZNETSOVA, J.A.

A case of giant pseudomyxoma of the peritoneum. Sov.med.19
no.10:90-91 0 '55. (MLRA 8:12)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (sav.--prof.
S.G.Rukosuyev) Yaroslavskogo meditsinskogo instituta.
(PERITONEUM, diseases
pseudomyxoma, giant)

KUZNETSOVA, L.A.

~~XXXXXXXXXXXXXXXXXXXX~~
Giant pseudomyxoma of the abdominal cavity. Vest.khir. 76 no.7:
136 Ag '55. (MLRA 8:10)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav.-prof. S.G.
Rukosuyev) Yaroslavskogo meditsinskogo instituta.
(ABDOMEN--TUMORS)

KUZNETSOVA, L.A. (Yaroslavl').

Late results of stomach resection in peptic ulcer. Klin.med.
36 no.11:66-71 N '58 (MIRA 11:12)

1. Iz kafedry gosptal'noy khirurgii (zav. - prof. A.A. Troitskiy)
rukovoditel' raboty - prof. A.A. Busalov) Yarosl'vaskogo meditsinskogo
instituta (dir. - prof. N.Ye. Yarygin):
(GASTRECTOMY, in various dis.
peptic ulcer, remote results (Rus))

KUZNETSOVA, L.A.

Late digestive disorders following gastric resection in peptic ulcer.
Sov. med. 24 no. 5:72-77 My '60. (MIRA 13:10)

1. Iz kafedry gosspital'noy khirurgii (zav. - prof. A.A. Troitskiy)
Yaroslavskogo meditsinskogo instituta (dir. - prof. N.Ye. Yarygin).
(STOMACH—SURGERY)

KUZNETSOVA, L.A.

Roentgenological study of the resected stomach at early and remote periods after operation. Sov. med. 24 no. 10:55-60 0 '60.

(MIRA 13:12)

1. Iz kafedry gospital'noy khirurgii (zav. - prof. A.A. Troitskiy)
Yaroslavskogo meditsinskogo instituta (dir. - prof. N.Ye. Yarygin).
(STOMACH—SURGERY)

KUZNETSOVA, L.A.

Reaction of dogs to some vascular tonus stimulants at different intervals following hypophysectomy. Biul. eksp. biol. i med. 55 no.1:40-43 Ja'63. (MIRA 16:7)

1. Iz kafedry patologicheskoy fiziologii (zav. - prof. L.N. Karlik) Ryazanskogo meditsinskogo instituta imeni akademika I.P.Pavlova. Predstavlena deystvitel'nym chlenom AMN SSSR V.V.Parinym.

(HYPOPHYSECTOMY) (BLOOD PRESSURE)
(VASOMOTOR DRUGS)

NALETOVA, O.A.; KUZNETSOVA, L.A.

Reaction of hypophysectomized dogs to some stimulants of the
vascular tonus. Nauch. trudy Riaz. med. inst. 15:81-84 '62.
(MIRA 17:5)

1. Kafedra patologicheskoy fiziologii (zav. kafedroy - prof.
L.N.Karlik) Ryazanskogo meditsinskogo instituta imeni Pavlova.

ACC NR: AP7002997 (A,N) SOURCE CODE: UR/0413/66/000/024/0103/0103

INVENTOR: Antonova, Ye.A.; Kuznetsova, L.A.

ORG: none

TITLE: Solder for joining metal to metal, ceramics or cermets. Class 49, No. 189668.

SOURCE: Izobreteniya, promyshlennyye obraztsey, tovarnyye znaki, no. 24, 1966, 103

TOPIC TAGS: solder, metal ~~joining~~ soldering, METAL JOINING, CERAMIC TO METAL SEAL, CERMET

ABSTRACT: This Author Certificate introduces a solder for joining metal to metal, ceramics or cermets. The solder consists of a filler and a binder, such as a noncaustic glass. To improve the air-tightness and oxidation resistance of the joint, the filler contains 20% chromium, 70% nickel, 5% boron, and 5% silicon. [TD]

SUB CODE: 13, // / SUBM DATE: 16Sep63/ ATD PRESS: 5114

Card 1/1

UDC: 621.791.36

KUZNETSOVA, L.A., kand. sel'skokhoz. nauk; ZLOBINA, L.Z.

Some physiological characteristics of the seeds of wild plants.
Uch. zap. Kab.-Balk. gos. un. no.10:61-66 '61. (MIRA 17:6)

USSR/Minerals - Spectral analysis

Card 1/1 Pub. 43 - 91/97

Authors : Feofilov, P. P., and Kuznetsova, L. A.

Title : Spectral luminescence method of determining the Cr content in synthetic rubies

Periodical : Izv. AN SSSR. Ser. fiz. 18/2, page 297, Mar-Apr 1954

Abstract : A method was developed for quantitative spectral determination of chromium in natural and synthetic rubies. A study of spectral, kinetic and polarization characteristics of the luminescence of rubies with various Cr contents showed that a change in Cr concentration affect mostly the luminescence spectra. The Cr ions which are isomorphically included in the crystalline lattice of corundum (Al_2O_3), determine the red color intensity and the luminescence of natural and synthetic ruby crystals.

Institution :

Submitted :

ЛАЗАРЕВСКАЯ, Л. А.

"Investigating the Phase Composition of the Per Salt Stratum of the Usol' Rock Salt Deposit." Cand Chem Sci, Kazan' State U imeni V. I. Ul'yanov-Lenin, Min Higher Education, Kazan', 1955. (KL, No 15, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

KUZNETSOVA, L.A.
USSR / Chemical Technology. Chemical Products and Their Appli- I-31
cation. Leather. Fur. Gelatin. Tanning Agents.
Technical Proteins.

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 10506

Author : Kirina, K.I., Kuznetsova, L.A., and Marder, G.S.
Inst : Moscow Technical Institute of the Meat and Dairy Industry
Title : A Method for the Preparation of a Soluble Modification
of Keratin

Orig Pub : Sb. stud. rabot Mosk. tekhnol. in-ta myas. i moloch. prom-
sti, 1956, No 4, 33-39

Abstract : The action of a 5 - 10% aqueous solution of Na₂S at 20°
transforms keratin into a soluble modification, keratein
(the yield of keratein is 74 - 77%); 1 - 10% solutions
of NaOH at 18 - 20° are not suited to the production of
keratein, since under these conditions a considerable
degradation of the protein macromolecule takes place.

Card : 1/2

USSR / Chemical Technology. Chemical Products and Their Appli- I-31
cation. Leather. Fur. Gelatin. Tanning Agents.
Technical Proteins.

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 10506

Abstract : The preliminary treatment of the keratin with a 5 - 10 M
urea solution increases its reactivity and facilitates the
transition of keratin to the soluble modification under the
action of Na_2S . At a temperature of $\sim 20^\circ$, keratin dissol-
ves in 1 - 3% alkaline solutions and in 5 M urea solutions
with the formation of viscous solutions. It has been esta-
blished that keratein can be used as an emulsifying and foa-
ming agent and as a component of film-forming compounds.

Card : 2/2

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000928220007-1

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000928220007-1"

Category: USSR / Physical Chemistry - Molecule. Chemical bond. B-4

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29587

Author : Kuznetsova L. A., Sveshnikov B. Ya.

Inst : Academy of Sciences USSR

Title : Effect of Dyestuff Concentration on Luminescence of Alcohol Solutions of Acridine Orange at a Temperature of -183° .

Orig Pub: Izv. AN SSSR, Ser. fiz., 1956, 20, No 4, 433-442

Abstract: Study of the effect of dyestuff concentration on the spectrum, duration and yield of summative glow and phosphorescence of alcohol solutions of acridine orange at -183° . At dyestuff concentrations below $6.5 \cdot 10^{-6}$ mole/liter $^{-1}$ the spectrum of summative glow undergoes practically no changes; it is determined by the monomeric form of the dye. When the concentration is increased from $1.6 \cdot 10^{-6}$ to $1.3 \cdot 10^{-2}$ mole/liter $^{-1}$, in the spectrum of summative glow the maximum is shifted in the direction of longer waves by at least 110 m μ and the appearance of the spectrum undergoes extensive changes, but the spectrum of phosphorescence is altered but little. Absorption spectra

Card : 1/2

-15-

Category: USSR / Physical Chemistry - Molecule. Chemical bond.

B-4

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29587

of monomeric, dimeric and tetrameric form of the dye have been recorded in alcoholic solutions at -183° . The associated molecules exhibit greater duration of excited (fluorescent) state, than the non-associated. On increase in concentration the duration of phosphorescence remains practically unchanged. Association results in an increased probability of a transition from fluorescent level to the metastable.

Card : 2/2

-16-

KITZMITSOVA L

A. J. K. Kirina and J. Kucetya

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000928220007-1

APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000928220007-1"

KUZNETSOVA, L.A.

51-5-5/26

AUTHORS: Kuznetsova, L.A., Sveshnikov, B.Ya. and Shirokov, V.I.

TITLE: On a Diffusion Theory of Fluorescence Quenching in Solutions by Foreign Substances. (O diffuzionnoy teorii tusheniya fluorestsentsii rastvorov postoronnimi veshchestvami)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.2, Nr 5, pp.578-586 (USSR)

ABSTRACT: S.I. Vavilov and his co-workers developed a diffusion theory of fluorescence quenching in solutions by foreign substances. This theory is here applied to study: (a) the dependence of the fluorescence yield and lifetime on the concentration of the quenching substance and the viscosity of the solvent, and (b) the fluorescence decay law of quenched solutions. In the theoretical part the authors, starting from a non-exponential law of fluorescence decay, show that both the yield (B) and the average lifetime (τ) of fluorescence are not proportional to the concentration of the quenching substance. This result does not contradict the Perrin-Vavilov relationship since the latter applies strictly only to the average lifetime of the excited state τ' , which is, in general, different from the average lifetime of emission τ . The non-

Oh a Diffusion Theory of Fluorescence Quenching in Solutions by
Foreign Substances. 51-5-5/26

exponential character of the fluorescence decay is proved for 3-aminophthalimide quenched with KI and dissolved in (1) glycerine or (2) ethylalcohol, as well as for (3) fluorescein dissolved in water and quenched with KI. The dependence of the fluorescence yield and lifetime on the concentration of KI is shown in Figs. 5, 6 and 7 for the three above solutions. There are 8 figures, 15 references, 9 of which are Slavic.

SUBMITTED: September 25th, 1956.

AVAILABLE: Library of Congress.

Card 2/2

FEOFILOV, P.P.; KUZNETSOVA, L.A.

Using Scintillation spectrometry for determining the chromium
content in synthetic rubies. Inzh.-fiz.zhur. no.4:46-52 Ap '58.
(Rubies) (Scintillation spectrometry) (MIRA 11:7)

Kuznetsova, L. A.
AUTHORS: Kuznetsova, L. A. and

Sveshnikov, B. Ya.

51-4-1-7/26

TITLE:

Dependence of Quenching the Fluorescence of Solutions by Absorbent Substances on the Viscosity of the Solvent.. (O zavisimosti tusheniya fluorestsentsii rastvorov pogloshchayushchimi veshchestvami ot vyazkosti rastvoritelya.)

PERIODICAL: Optika i Spektroskopiya, 1958, Vol.IV, Nr.1, pp. 55-59. (USSR)

ABSTRACT: The present paper shows that in some cases the yield and duration of fluorescence of solutions, quenched by substances which absorb luminescence, depend not only on the concentration of the quenching substance, but also on the solvent viscosity. This finding contradicts earlier views expressed by Vavilov and Galanin (Ref.2), Förster (Ref.3), Vavilov and Frank (Ref.4). The following combinations of fluorescent and quenching substances were studied; 3-aminophthalimide + chryscidin,

Card 1/6

51- 4 -1-7/26

**Dependence of Quenching the Fluorescence of Solutions by
Absorbent Substances on the Viscosity of the Solvent.**

3-aminophthalimide + fuchsin, 3-aminophthalimide + crystal violet, rhodamin 5G + fuchsin. Glycerine, isoamyl, ethyl and methyl alcohols were used as solvents. The technique of experiments employed was that described in ref.5. The main difference between the method of Ref.5 and the present measurements lay in the extension to the cases where absorption of the exciting light was not complete (dilute solutions). Thin layers (0.07 - 2 mm) with constant absorption (the dye concentration was inversely proportional to the layer thickness) were employed. Since solutions of chrysoidin were found to be unstable under heating to 70 - 80°C, the combination 3-aminophthalimide + chrysoidin was not studied further. Fig.2 gives the fluorescence spectra

Card 2/6 of non-quenched (curves 1) and quenched (curves 2)

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Dependence of Quenching the Fluorescence of Solutions by
Absorbent Substance on the Viscosity of the Solvent.

solutions of 3-aminophthalimide with crystal violet (Fig.2, a), fuchsin (Fig.2, b), and of rhodamin 5G quenched with fuchsin (Fig.2, v). These spectra remain practically unchanged in the whole region of concentrations studied. The exception was 3-aminophthalimide + fuchsin dissolved in glycerine (Fig.3), where a considerable deformation of the fluorescence spectrum took place on an increase of the fuchsin concentration from 3×10^{-4} to 3×10^{-3} mole/litre. Fig.4 shows the values of the reciprocals of the relative yield and the relative duration of fluorescence as functions of the concentration of the quenching substance. Fig.4, a

Card 3/6 gives results for 3-aminophthalimide + crystal violet;

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Dependence of Quenching the Fluorescence of Solutions by
Absorbent Substance on the Viscosity of the Solvent.

Fig.4, b - for 3-aminophthalimide + fuchsin; Fig.4, v -
for rhodamin 5G + fuchsin. The continuous curves show
the variation of the duration of fluorescence, and the
dashed curves show the change in the fluorescence yield.
Dependence of quenching on viscosity shows clearly in
two cases: 3-aminophthalimide + crystal violet, and
rhodamin 5G + fuchsin. To verify this dependence of
quenching on the solvent viscosity the authors also
obtained quenching isotherms (change of the duration of
fluorescence) for a solution of 3-aminophthalimide
+ crystal violet in isoamyl alcohol (Fig.5, b), and
isotherms of change of the yield with change of the
concentration of the quenching substance for
3-aminophthalimide + crystal violet in glycerine

Card 4/6 (Fig.5, a). In the first case a considerable dependence

51-4-1-7/26

**Dependence of Quenching the Fluorescence of Solutions by
Absorbent Substances on the Viscosity of the Solvent**

of quenching on viscosity was observed; in the second case it was absent. The discovered dependence of quenching on the solvent viscosity is an important confirmation of the usual mechanism of fluorescence quenching. This mechanism is based on three assumptions: (1) frequency of the transition from the exciting molecule to a quenching molecule is inversely proportional to the sixth power of the distance between two such molecules, and it depends on the orientation of these molecules; (2) this frequency does not depend on the duration of interaction of the two molecules if the distance between them remains constant; (3) probability that a given transfer of energy will cause quenching does not depend on the relative orientation of the

Card 5/6

51-4 -1-7/26
Dependence of Quenching the Fluorescence of Solutions by
Absorbent Substances on the Viscosity of the Solvent

molecules taking part in it. To explain the very weak dependence of the fluorescence quenching of 3-aminophthalimide + fuchsin on the solvent viscosity (Fig.4,b), the authors suggest some sort of interaction between an excited phthalimide molecule and fuchsin, which was not taken into account in the mechanism described above. The authors thank A.M. Bonch-Bruyevich for loan of a fluorometer, and G.A. Tishchenko and V.I. Shirokov for help in measurements. There are 5 figures and 6 references, of which 1 is French, 1 German and 4 Russian.

ASSOCIATION: State Institute of Optics Imeni S.I. Vavilov.
(Gos. opticheskiy institut im. S.I. Vavilova.)

SUBMITTED: March 23, 1957.

AVAILABLE: Library of Congress.
Card 6/6 1. Solutions-Spectra

AUTHORS: Sveshnikov, B. Ya., Shirokov, V. M., SOV/48-22-9-9/40
Kuznetsova, L. A., Kudryashov, P. I.

TITLE: On the Kinetics of the **Quenching** of the Fluorescence of
Solutions by Means of Foreign Substances (O kinetike
tusheniya fluorestsentsii rastvorov postoronnimi veshchest-
vami)

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya fizicheskaya, 1958,
Vol 22, Nr 9, pp 1047 - 1050 (USSR)

ABSTRACT: The method of counting the effective collisions between
the molecules of the reacting substances is very
important for the theory of the extinction of the
fluorescence of solutions as well as for the theory
of reactions in the solutions. The work by Vavilov, 1929,
(Ref 4) presented the first striking proof that the
application of the diffusion theory is possible in
the computation of the number of effective collisions
in solutions. Nevertheless, Vavilov's formula for the
extinction gave no exact quantitative description of
this phenomenon. To remove the discrepancy between

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On the Kinetics of the **Quenching** of the Fluorescence of Solutions by Means of Foreign Substances SOV/45-22-9-9/40

theory and experiment Vavilov and Frank (Ref 5) set up a hypothesis on an additional statistical extinction. In 1935 one of the authors (Ref 6) succeeded in establishing a formula for the extinction which explains the non-linear dependence of the quantity B_0/B on the concentration c of the extinction agent without the assumption of a statistical extinction. This was possible because of a thorough analysis of the kinetics of the diffusion processes taking place around the excited molecule. The good agreement of the theoretical and experimental data validates the non-exponential law of fluorescence extinction and of the diffusion mechanism of the extinction. The experimental data not only prove the diffusion theory of fluorescence extinction by other substances, but also present the first experimental proof for the correctness of the formula by Smolukhovskiy-Kolmogorov-Leontovich (Ref 8). This formula assumes that the rate of diffusion depends on the time which has elapsed since the beginning of diffusion (Brownian movement). There are 2 figures,

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On the Kinetics of the **Quenching** of the Fluorescence of Solutions by Means of Foreign Substances SOV/48-22-9-9/40

2 tables, and 8 references, 6 of which are Soviet.

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5(4)

SOV/20-121-6-27/45

AUTHORS: Sveshnikov, E. Ya., Kuznetsova, L. A.

TITLE: Concerning the Diffusion Theory of the Kinetics of the Bimolecular Reactions in Solutions (K diffuzionnoy teorii kinetiki bimolekulyarnykh reaktsiy v rastvorakh)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 121, No 6, pp 1045-1047 (USSR)

ABSTRACT: The authors investigate the influence of the solvent on the extinction of the phosphorescence of alcohol-glycerin solutions of acridine orange by potassium iodide and oxygen. The main property of this extinction is the variation of the life of the phosphorescent state of the molecule. In some individual cases also the variation of the relative phosphorescence yield during the extinction was investigated. All the investigated solutions contained $5 \cdot 10^{-5}$ mol/l of acridine orange. The measuring apparatus consisted of a mercury vapor lamp for extremely high pressures (with a stabilizer designed by V. I. Shirokov), of a lens and of 2 light filters. If the holes in the disks of the phosphoroscope are suitably selected, the curve for the damping of the phosphorescence may correspond

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SOV/20-121-6-27/85

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to a noticeable change of the initial intensity of the luminescence. This curve may be approximated by an exponential curve if the short initial and final parts of the curve (which correspond to the opening and closing of the holes of the phosphoroscope) are not taken into account. The time constant found in this way coincides well with the constant found in the usual way. The exact determination of the relative yield of the phosphorescence by means of a Becquerel ('Beckerel') phosphoroscope is rather difficult, if the life of the phosphorescence has the same order of magnitude as the revolution time of the phosphoroscope disk. A diagram gives the values of the life of the phosphorescent state in the degasified (τ) and not degasified (τ) solutions of acridine orange as a function of the liquidity of the solution. The curve of this diagram seems to be rather similar to the well-known dependence of the yield (life-time) of the fluorescence on the viscosity of the solvent. A similar curve is found for the influence of viscosity on the extinction of the phosphorescence of degasified solutions of acridine orange by potassium iodide. The assumption that the extinction of the phosphorescence of the solutions of acridine orange is

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caused by diffusion processes agrees well with previous re-
sults. There are 4 figures and 9 references, 7 of which are
Soviet.

PRESENTED: April 23, 1958, by A. N. Terenin, Academician

SUBMITTED: April 10, 1958

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BOGATSKIY, D.P., prof.; MINEYEVA, I.A., dots.; SHPRINK, B.E., prof., re-
tsenzent; MAMEDOV, A.M., dotsent, retsenzent; KUZNETSOVA, L.A.,
red.; VLADIMIROVA, L.A., tekhn. red.

[Phase rule and its application in the technology of metals;
lectures for students of the engineering faculty] Pravilo faz i ego
primenenie v tekhnologii metallov; lektsii dlia studentov inzhener'nogo
fakul'teta. Moskva, Vses. sel'khoz. in-t saoznogo obrazovaniia,
1960. 39 p. (MIRA 14:7)

1. Zaveduyushchii kafedroy remonta traktorov, avtomobiley i sel'sko-
khoz'yaystvennykh mashin Vsesoyuznogo sel'skokhoz'yaystvennogo instituta
saoznogo obrazovaniya (for Mamedov)
(Metallurgy) (Phase rule and equilibrium)

82674

S/072/60/000/009/004/007
B021/B058

18.7400

AUTHORS: Appen, A. A., Antonova, Ye. A., Kuznetsova, L. A.TITLE: Heat-resistant Coatings on Cast-iron Products

PERIODICAL: Steklo i keramika, 1960, No. 9, pp. 22-26

TEXT: As a consequence of heating, cast-iron products are destroyed owing to gas corrosion. An increase of their volume takes place in this connection, as can be seen from the paper by N. A. Aleksandrov.

G. T. Bakhvalov and A.Z. Turkovskaya ascertained that an increase in volume sets in and the strength of the metal is reduced with alternative heating and cooling. In the study under review, the authors tried to reduce gas corrosion of cast iron at high temperatures by providing its surface with a heat-resistant glass-metal coating according to the enameling process. The coatings were produced from mixtures of finely disperse metal powders with silicate binding agent. Glass of the following composition was used as binding agent: 28.6% SiO₂; 4.9% B₂O₃; 0.8% Al₂O₃; 23.0% Cr₂O₃; 1.9% MnO₂; 33.7% BaO; 3.8% ZnO; 2.7% CaO; 1.0% CoO. The

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Heat-resistant Coatings on Cast-iron Products

S/072/60/000/009/004/007
B021/B058

following mixture of powders was used as metal component: 20% Cr; 70% Ni; 5% B; 5% Si. The degree of dispersion of the metal powders determined by means of sedimentation is given in Table 1. The protective coatings were fired in a special electric furnace in argon atmosphere at a temperature of from 1000 to 1100°C. The results of experiments with cast-iron samples as to heat resistance at 900°C in air are given in Table 2. Oxidation curves of cast-iron samples in air at 900°C are given in Fig. 1. The difference between the coefficients of thermal expansion for the coating and the cast iron decreases with the increase of the amount of the metal component in the protective coating (Table 3). The thermal-expansion curves of the glass-metal coatings investigated are shown in Fig. 2. The cross section of the cast-iron samples with coating can be seen from the polished sections (Figs. 3 and 4). In conclusion, it is stated that a glass-metal coating is to be considered as an effective protection for cast iron in air at a temperature of up to 900°C. The coatings are molten on in neutral atmosphere (argon, nitrogen) at a temperature of from 1000 to 1100°C. There are 4 figures, 3 tables, and 8 references: 3 Soviet and 3 US. ✓

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L 16742-63

EWP(r)/EWT(m)/BDS AFFTC

S/124/63/000/004/035/064

53

AUTHOR: Surkin, R. G.; Kuznetsova, L. A.

26

TITLE: The problem of bending a sloping spherical panel of square plan, with a nonlinear relation between deformation and stress

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 4, 1963, 7, abstract 4V48
(Tr. Konferentsii po teorii plastin i obolochek, 1960, Kazan', 1961, 362-366.)

TEXT: The problem stated in the title is solved on the assumption that between the stress intensity, $\sigma_{sub\ i}$ and the deformation, $\epsilon_{sub\ i}$, there exists the non-linear relationship; $\sigma_{sub\ i}$ equals $E\epsilon_{sub\ i}(1 - \gamma_{sub\ 2\ sub\ i})$, where E and gamma are constants. The authors use the Bubnov-Galerkin method, with subsequent recourse to a digital electronic computer. A portion of the results obtained are given in tabular form. The effect of nonlinearity with real values of the parameter gamma would seem to be substantial. V. I. Fedos'yev.

[Abstracter's note: Complete translation.]

Card 1/1

ANTONOVA, Ye.A.; KUZNETSOVA, L.A.

Temperature of formation and the structure of glass-metal coatings
on steel. Zhur. prikl. khim. 36 no.8:1637-1641 Ag '63.
(MIRA 16:11)

L 16930-63

EPF(c)/EWP(q)/EWT(m)/BDS AFFTC JD

S/0716/63/037/004/022/029

60

AUTHOR: Samoylova, A. N., Mal'tsev, V. A., Tatevskiy, V. M., Kurdyumova,
I. N., Kuznetsova, L. A.

TITLE: Absorption spectrum due to photolysis of boron chloride with ozone

PERIODICAL: Zhurnal fizicheskoy khimii, V. 37, No. 4, 1963, 909

TEXT: The authors studied the reaction of oxidation of boron bromide by oxygen and of boron chloride by ozone. It is shown that in pulse photolysis of a mixture of boron trichloride with ozone it is possible to observe a band of 4,780 Å, for which the carrier is apparently an intermediate compound in the process of the oxidation of BCl₃ to BO₂. There is 1 figure. The most important English-language reference reads as follows: Johns, Canad. J. Physics, 39, 1738, 1961.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: June 14, 1962

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ACCESSION NR: AP4020975

S/0051/64/016/003/0542/0543

AUTHOR: Kuznetsova, L.A.; Kuzyakov, Yu.Ya.; Tatevskiy, V.M.

TITLE: On the electronic absorption spectrum of the NF_2 radical

SOURCE: Optika i spektroskopiya, v.16, no.3, 1964, 542-543

TOPIC TAGS: radical absorption, tetrafluorohydrazine, nitrogen difluoride radical

ABSTRACT: F.A. Johnson and C.B. Colburn (*J. Amer. Chem. Soc.* 83, 3043, 1961) observed a region of "continuous absorption" near 2600 \AA in the spectrum of the products of thermal decomposition of tetrafluorohydrazine (N_2F_4), which they attributed to the NF_2 radical. In the present work this region was re-investigated by means of a higher dispersion and resolution instrument (an ISP-28 spectrograph). The tetrafluorohydrazine at different pressures from 5 to 200 mm Hg was heated in an aluminum tube to different temperatures - up to about 750°C - where absorption in the 2600 \AA region disappears. The study disclosed that the NF_2 absorption spectrum in the 2600 \AA region is actually not continuous but consists of 16 bands. The intensity and sharpness of the bands increase with temperature up to about $300\text{-}400^\circ\text{C}$. The wavelengths of the bands are tabulated, and a set of three microdensitometer traces is

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ACCESSION NR: AP4020975

reproduced in a figure. The average separation between the bands is about 390 cm^{-1} . This frequency is associated with deformation vibrations of the radical. Orig.art. has: 1 figure and 1 table.

ASSOCIATION: none

SUBMITTED: 16Jul63

DATE ACQ: 02Apr64

ENCL: 00

SUB CODE: PH, CH

NREF SOV: 000

OTHER: 001

2/2

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