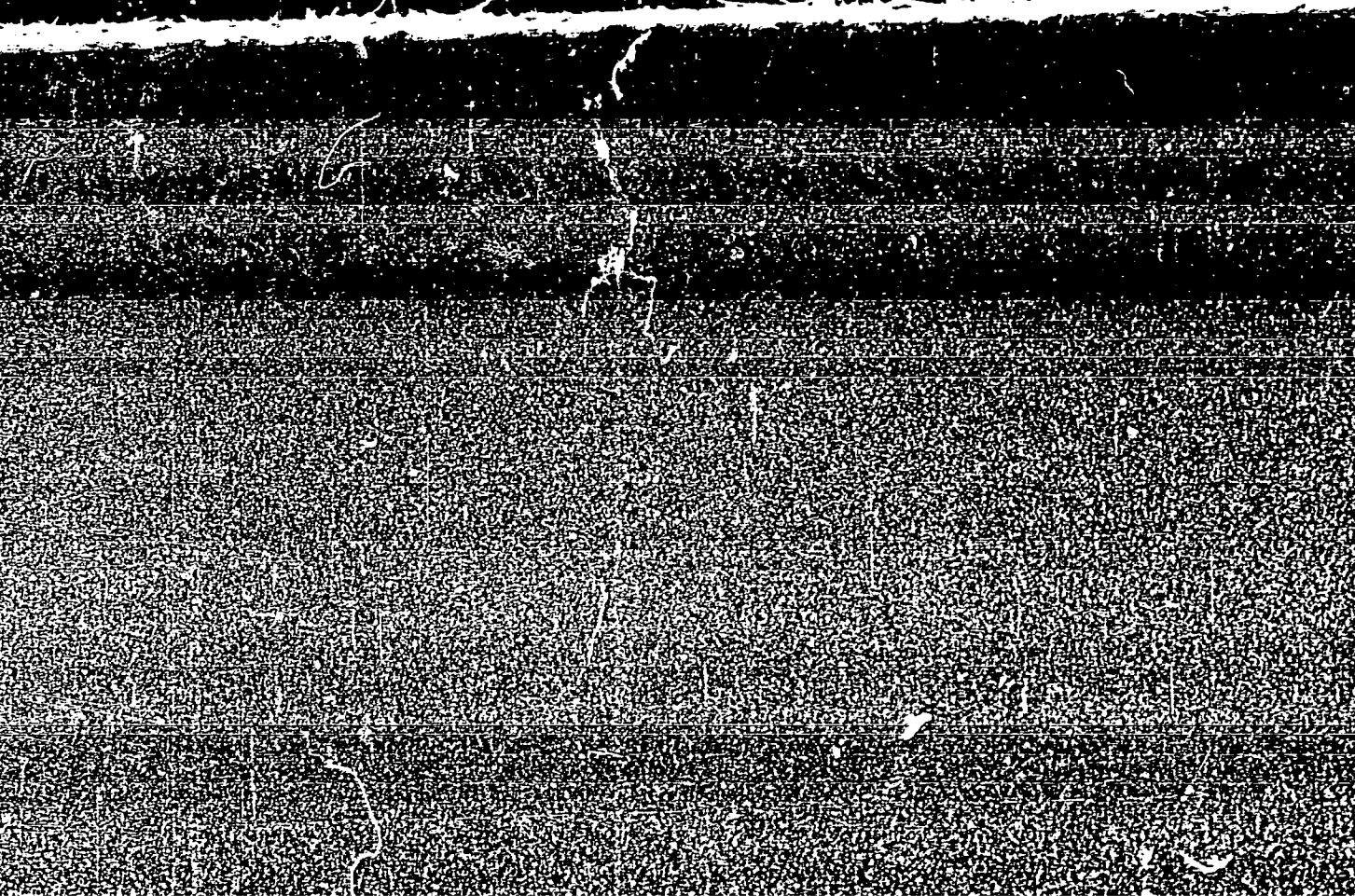


"APPROVED FOR RELEASE: 03/13/2001

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CIA-RDP86-00513R001033810001-4"



MEZHENINOV, M.Yu.

Ways of modernizing the equipment of tanning plants. Leg. pron. 1.
no.5:10-18 My '55.
(Tanning)
(MIRA ...)

SMIRNOV, S.I.; MEZHENINOV, M.Yu.

Simple stackers. Obm.tekh.opyt. [MLP] no.27:12-15 '56.
(Materials handling) (MIRA 11:11)

YASIN, M.G.; MEZHENINOV, M.Yu.

Using V-belts for rotating chopping machines. Obm.tekn.opyt.
[MLP] no.27:15-17 '56. (MIRA 11:1')
(Crushing machinery)

MESHCHERYAK, G.Ye.; MEZHENINOV, M.Yu.

Pneumatic shutting of bottom lids of diffusers. Obm.tekh.opyt.
[MLP] no.27:17-19 '56. (MIRA 11:11)
(Diffusers)

YASIN, M.G.; MEZHENINOV, M.Yu.
~~XXXXXXXXXXXXXXXXXXXX~~

Devices for preventing casual openings of bottom lids of diffusers.
Obm.tekh.opyt. [MLP] no.27:19-21 '56. (MIRA 11:11)
(Diffusers--Safety measures)

YASIN, M.G.; MEZHENINOV, M.Yu.

Improved fitting of bottom filters in diffusers. Obm.tekh.opyt.
[MLP] no.27:21-23 '56. (MIRA 11:11)
(Diffusers)

YASIN, M.G.; ~~MEZHENINOV, M.Yu.~~

Barometric condensers made of stainless steel. Obm.tekh.opyt.
[MLP] no.27:24-26 '56. (MIRA 11:11)
(Condensers (Vapors and gases))

YASIN, M.G.; MEZHENINOV, M.Yu.

Heating columns having shortened tubes and used in Kestner apparatuses
for producing solid extracts. Obn.tekh.opyt. [MLP] no.27:26-27
'56. (MIRA 11:11)

(Condensers (Vapors and gases))

KORCHAGIN, I.G.; MEZHENINOV, M.Yu.

Devices used for pouring into sacks and weighing extract flowing
out of Kestner apparatuses. Obm.tekh.opyt. [MLP] no.27:28-29
'56. (MIRA 11:11)
(Tanning materials) (Condensers (Vapors and gases)--Attachments)

IVANOV, Ye.M.; MEZHENINOV, M.Yu.

~~.....~~
Pneumatic brushes used for cleaning pipes of Kestner apparatuses
ofr producing solid extract. Obm.tekh.opyt. [MLP] no.27:29-31
'56. (MIRA 11:11)

(Brooms and brushes)

MEZHENINOV, M. Yu.

Utilising the steam of the secondary boiling-up. Obm.tekh.opyt.
[MLP] no.27:31-33 '56. (MIRA 11:11)
(Steam engineering)

MAKSLEYEV, V.Yu.; MEZHEMINOV, M.Yu.

Discharging wash water from Kestner apparatuses for producing
solid extract. Obm.tekh.opyt. [MLP] no.27:33 '56. (MIRA 11:11)
(Condensers (Vapors and gases))

BELOVODENKO, A.I.; MEZHENINOV, M.Yu.

Measures for preventing wash water from getting into boiler
furnaces. Obm.tekh.opyt. [MLP] no.27:33-34 '56. (MIRA 11:11)
(Boilers--Safety measures)

YASIN, M.G. & MEZHENINOV, M.Yu.

Long-link chains used for hoists and conveyors. Obm.tekh.opyt.
[MLP] no.27:34-35 '56. (MIRA 11:11)
(Chains)

BELOVOZHENKO, A.I.; MEZHENINOV, M.Yu.

Improved rolling-out of watertubes for boilers. Obm.tekh.opyt.
[MLP] no.27:35-36 '56. (MIRA 11:11)
(Rolling (Metalwork)) (Boilers, Watertube)

IVANOV, A.I.; MEZHENINOV, M.Yu.

Devices used for bending steel sheets in making hoist buckets.
Obn.tekh.opyt. [MLP] no.27:36-37 '56. (MIRA 11:11)
(Sheet-metal work)

KUSAKIN, P.S.; MEZHENINOV, M.Yu.

Simple pipe-cutting machine. Obm.tekh.opyt. [MLP] no.27:
37-39 '56. (MIRA 11:11)
(Pipe cutting)

MEZHERINOV, M.Yu.

Marketing of tanning extracts in granulated form. 4ozh.-obuv.
pron. 2 no.5:23-25 My '60. (MIRA 13:9)
(Tanning materials)

MEZHENINOV, Mikhail Yur'yevich, insh.; KRASUKHIN, Moisey Naumovich,
kand. tekhn. nauk; YEGOROV, Boris-Aleksandrovich, insh.;
NIKITIN, D.V., nauchnyy red.; MINAYKVA, T.M., red.; KNAKHIN,
M.T., tekhn. red.

[Manufacture of vegetable tanning extracts] Proizvodstvo rastitel'-
nykh dubil'nykh ekstraktov. [By] M. I. U. Mesheninov, M. N. Krasukhin,
B. A. Egorov. Moskva, Rostekhzdat, 1962. 291 p. (MIRA 16:3)
(Tanning materials)

MEZHKO, I.V.

Card 4/4

USSR / Cultivated Plants. Polder Grasses and Edible Roots. M

Abstr Jour : Ref Zhur - Biologiya, No 6, 1954, No. 24021
Author : Zhuravlev, Ya. M. I Volkova, M. G.; Kabanov, I. V.; Ivanovskiy, V. M.
Inst : Penzion Agrobiologicheskogo Instituta
Title : Contents of Polder Grasses, Depending upon the Phase of Plant Development

Or-16 Pub : SP. Tr. Penzonsk. s.-kh. In-ta, 1954, YP 2, 403-424

Abstract : Specimens of fresh grasses - leguminous (alfalfa, espartero, vetch) and cereal (amara bromegrass, sobor, sudan grass, oats) were taken in various phases of plant development. The weight relation between leaves and stalks, water content, pigment (chlorophyll, carotenoids, xanthophyll) and carbohydrate (glucose, sucrose, saccharose, starch) were determined in the leaves and the stalks. Qualitative analyses of the leaves for protein and starch content were conducted. As the plants develop, the percent content of chlorophyll is decreased, the reciprocal relation between the weight of leaves and stalks changes in favor of increased leaves and stalks share of the stalks. Increasing the biomass of plants in the leaves, this difference grows larger as the plants developed. The correlation between the quantities of xanthophyll and carotens in the leaves, fluctuated from 5 to 2:2 between the quantity of chlorophyll and the amount of carotens in the leaves - from 5 to 12:8 in the cereals - from 5 to 11:7. In the cereals the quantity of chlorophyll and carotens in leaves from 25:1 to 38:7 in the cereals - from 15:4 to 25:4. On a background of full mineral fertilization, oats in the phase of leaflet maturity had a higher content of pigment than the controls: chlorophyll and carotens by 2% and the xanthophyll by 4%. Starch content in the leguminous stalks fluctuated from 14% to 35% in relation to the amount of chlorophyll, and the starch in the cereal stalks completely or almost completely was absent. The total quantity of soluble carbohydrates in the stalks were considerably higher than in the leaves. The starch content in the leaves and protein content was usually found in reverse ratio. In the vetch and leaves protein starch was almost absent; the soluble carbohydrates of the whole were represented by saccharose. The stalk was carried out in 1956. -- D. S. Chernov

USSR / Farm Animals. General Problems.

Abstr Jour : Ref Zhur - Biologiya, No 5, 1959, No. 21199

Author : Zhuravlev, Ye. M.; Zeyliger, D. O.; Mezhenko, I. V.;
Ivanovskiy, V. M.

Inst : Penza Institute of Agriculture
Title : Changes of the Chemical Composition of Red Clover
Leaves When Dried

Orig Pub : Sb. Tr. Penzenskogo s.-x. in-ta, 1958, Vyp. 2,
425-437

Abstract : The entire clover plant of the Penzenskiy 1 variety
and lucerne plant of the improved Bol'shev'yasskaya
variety were dried in a laboratory with dissipated
light. The leaves of the 4th and 5th layers were
analyzed. The leaves were analyzed 24, 48 and 96
hours after drying. To the extent to which the plants

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10

USSR / Farm Animals. General Problems.

Q

Abstr Jour : Ref Zhur - Biologiya, No 5, 1959, No. 21195

become dehydrated, osmotic pressure of cellular juice increases, as well as transparency of protoplasm, the original structure of the protein complex becomes disrupted, proteins are subjected to denaturation, the stability of the pigment-protein-lipoid complex of plastids becomes impaired, and as a result losses of nutritious substances increase. -- F. M. Kazantsev

Card 2/2

Mezhenko, Yu. A

Russkaya tekhnicheskaya periodika, 1800-1916 gg;
bibliograficheskiy ukazatel'. Moskva, Akademkniga,
1955.

298 p. facsims, 27 cm.

At head of title: Akademiya Nauk SSSr. Institut
Istorii Yestestvoznaniya I Tekhniki.

MEZHENNAYA, S. O., OSVENSKIY, V. B., and BELYAKOV, L. N., AVRAAMOV, Yu. S., (Moscow Inst. of Steel.)

"The Internal Friction of 'Metastable' Solid Solutions."

report presented at an Inter-vuz Conference on Relaxation Phenomena in Pure Metals and Alloys, 2-4 Apr 1958, at Moscow Inst. of Steel.

Vest. Vys. Shkoly, 9, 72-3, 1958.

18 (1)

AUTHORS:

Avraamov, Yu. S., Mezhenaya, S. O.

SOV/163-59-2-34/48

TITLE:

Investigation of the Alloy Ni₃Mn by the Method of Internal Friction (Issledovaniye splava Ni₃Mn metodom vnutrennego treniya)

PERIODICAL:

Nauchnyye doklady vysshey shkoly. Metallurgiya. 1959, Nr 2, pp 189-193 (US R)

ABSTRACT:

The phase composition of the alloy Ni₃Mn was investigated by the method of internal friction after various thermal treatment. The influence of the thermal treatment on the Ni₃Mn alloy in dependence of the temperature on the internal friction was investigated and the results are given in figure 1. Two maxima, A and B, occur at 120 and 290° on the temperature curve of the hardened alloy. The maxima can be interpreted as meta-stability in the orientation of the solid solutions. The dependence of the internal friction of the deformed steel on temperature was investigated and is given in figure 2. Beside the maxima A and B also the maximum D occurs at 226° on the temperature curve of the internal friction of the deformed Ni₃Mn alloy (deformation degree 75 %). The maximum D is interpreted

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Investigation of the Alloy Ni₃Mn by the Method of
Internal Friction

SOV/163-59-2-14/48

likewise as meta-stability of the solid solution. A further maximum (C) occurs on the temperature curve of the internal friction of carbonaceous alloys at 360° (Fig 3). The occurrence of the maximum C is explained by the diffusion of the carbon atoms in the stress field. The amount of the maximum C in carbonaceous samples is reduced after six hours of melting at 360° and subsequent hardening in water, in consequence of the carbide formation in the solid solution. Only one maximum occurs at 360° on the temperature curve of the internal friction after the separation of the carbide phase. The method of internal friction makes the investigation of the orientation state in the alloy possible. There are 3 figures and 5 references, 3 of which are Soviet

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

SUBMITTED: July 10, 1958

Card 2/2

66234

SOV/126-8-3-18/33

18.7520

AUTHORS: Livshits, B.G., Avraamov, Yu.S., Osvenskiy, V.B.,
Mezhennaya, S.O. and Belyakov, L.N.

TITLE: Internal Friction of Metastable Solid Solutions

PERIODICAL: Fizika metallov i metallovedeniye, 1959, Vol 8, Nr 3,
pp 440-448 (USSR)

ABSTRACT: The alloy of stoichiometric composition Ni_3Mn and alloys of the same composition alloyed with 1.34 and 2.77% Mo, respectively, were studied by measuring the temperature dependence of internal friction. Using this method, Ni_3Fe type alloys without molybdenum and those alloyed with molybdenum, and also EI437A type alloys (nimonic) were studied. The chemical composition of the investigated alloys is shown in the table on p 441. The internal friction was measured in wire specimens, 300 mm long and 0.7 mm diameter, in vacuum. The alloy Ni_3Mn is an ordered alloy with a Curie point of approximately $350^{\circ}C$ (Ref 10 and 11). In the curve showing the temperature dependence of internal friction of a quenched Ni_3Mn alloy (quenched from a temperature above that at which ordering occurs) two peaks, A and B, with maxima at 120 and $290^{\circ}C$ are observed (Fig 1). In the curve of the temperature

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SOV/126-8-3-18/33

Internal Friction of Metastable Solid Solutions

dependence of internal friction of a deformed Ni₃Mn alloy (75% deformation), the peaks A and B remain and an additional peak, D, having a maximum at 226°C, appears; the general level of internal friction rises sharply (Fig 2). An additional peak, C, having a maximum at 316°C, is evident in a carburized Ni₃Mn alloy containing 0.35% C (Fig 3). The appearance of this peak is due to the diffusion of carbon atoms in the elastic stress range. During the investigation of the influence of alloying the Ni₃Mn solid solution with molybdenum, it was found that supplementary maxima - peaks M and C at 12 and 316°C - appeared in temperature dependence of internal friction curves (Fig 4). In Fig 5, the influence of heat treatment on the temperature dependence of a Ni₃Mn alloy containing 1.34% Mo is shown. A similar result is obtained with an alloy containing 2.77% Mo. On measuring the internal friction of Ni₃Fe alloys alloyed with Mo (Fig 6) two peaks were obtained in the low temperature range, one in the region of 85°C (peak A) and the other at 170°C (peak B). Fig 7 shows the influence of heat treatment on the temperature dependence of internal

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SOV/126-8-3-18/33

Internal Friction of Metastable Solid Solutions

friction of the alloy Ni_3Fe . Fig 8 shows the influence of heat treatment on the internal friction of a nimonic alloy. In Fig 9, the change in internal friction with Ti content in a nimonic alloy is shown. The authors conclude that on measuring the temperature dependence of internal friction of metastable solid solutions characteristic effects can be expected even when the structural factor is exceedingly small. The magnitude of the effects in this case must be the greater, the greater the difference in free energy between a quenched and tempered alloy. A comparison of the internal friction of ordering alloys with that of alloys forming a K-state structure at low temperatures is exceedingly interesting (see Fig 4 and 6). On adding molybdenum to ordering alloys (Ni_3Mn) the metastability peak decreases as molybdenum decreases the degree of possible order. Conversely on adding this element to K-state alloys ($Ni_3Fe + Mo$) the metastability peak increases, as the increase in molybdenum concentration appears to increase the extent of atom segregation (K-state) in the solution. The same can be said about titanium in the alloy EI437

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66234

SOV/126-8-3-18/33

Internal Friction of Metastable Solid Solutions

(Fig 9). Thus measurement of the internal friction (metastability peaks) renders differentiation between ordering and K-state possible. There are 9 figures, 1 table and 19 references, 12 of which are Soviet and 7 Western.

SUBMITTED: August 12, 1958

Card 4/4

4

MEZHENNAYA S. O.

PHASE I BOOK EXPLANATIONS 809/5303

Moscow, Institut stali

Belokatsionnyye yavleniya v metallakh i splavakh; trudy Mezhdunarodnogo sveshchennogo (Relaxation Phenomena in Metals and Alloys) Transnational of the Inter-Institute Conference) Moscow, Metallurgizdat, 1960. 306 p.

Sponsoring Agency: Ministerstvo vysshogo i srednego spetsial'nogo obrazovaniya SSSR and Gosvolnyi Institut stali imeni I.V. Stalin.

Ed.: (Title page): B.B. Pribal'shteyn; Ed. of Publishing House: Ye.I. Levitskiy; Ed.: A.I. Karasov.

PURPOSE: This collection of articles is intended for personnel in scientific institutions and schools of higher education and for physical metallurgists and physicists specializing in metals. It may also be useful to students of these fields.

CONTENT: The collection contains results of experimental and theoretical investigations carried out by schools of higher education and scientific research institutions in the field of the relaxation phenomena in metals and alloys. Several articles are devoted to the investigation of the internal-friction method of the detection of superlattice solid solutions. Also included are the defects of the crystalline lattice plastic deformation, the stress-strain behavior of alloys and creep. Problems of the relaxation by dislocations, friction and creep brittleness, the use of the method of internal friction in the investigation of polymer-metalurgy products, and the mechanics of fatigue are discussed. The collection also contains articles on the dynamic characteristics of materials, elastic after-effect, and the new slow-detection method. No personalities are mentioned. References follow most articles. There are 366 references: 192 Soviet and 174 non-Soviet.

Buris, B.A. [Moscow Steel Institute]. On Dispersion Correlations in the Theory of Elastic Relaxation 95

Blazhenkov, E.F., and A.A. Babonova [Inzenerovskiy metallurgicheskiy institut (Inzenerovskiy Metallurgical Institute)]. Effect of the Tempering Temperature After Quenching and the Temperature of Isothermal Processing on the Vibration Damping in the Silicon Spring Steel 96

Figuinov, Ivan, M.F. Alibayev, and Lu.S. Fedorenko [Moscow Steel Institute and Yuzovskiy Institut aviatsionnogo materialov (All-Union Institute of Aviation Materials)]. Effect of the Paper Brittleness of High-Chromium Steels on the Internal Friction 94

Chernikova, I.S. [Moscow Steel Institute]. Study of the Tempering of Carbon Steels by the Internal-Friction Method 95

Krishtal, M.A., and S.A. Golovoi. [Tul'skiy mekhanicheskiy institut (Tula Mechanical Institute)]. On the Problem of the Internal Friction in Hardened and Tempered Steel 95

Krishtal, M.A., and S.A. Golovoi [Tula Mechanical Institute]. Relative Damping of Torsional Vibrations in Heat-Treated VTA steel 101

Shimk, Izrael, and Karel Toman [Institute of Technical Physics of the Czechoslovak Academy of Science]. Aging of the Aluminum-Silver Alloy 104

Mal'tseva, O.K., and Ye.I. Znaminsky [Krasnovskiy pedagogicheskiy institut (Krasnovskiy Pedagogical Institute)]. Decomposition of the Superaturated Beryll-Copper Solid Solution 109

Pol'yakov, S.K. [Institut Chernoy Metallurgii AS Otdel (Institute of Ferrous Metallurgy of the Academy of Science USSR)]. Behavior of Carbon in α -Iron Alloys Alloyed with Manganese and Molybdenum 116

Shvabits, B.G., Lu.S. Artyukov, Lu.S. Chernitskiy, S.O. Neizbornaya, and I.N. Melnikova [Moscow Steel Institute]. Internal Friction of Metals and Alloys 126

Dugan, L.F. [Moscow Steel Institute]. Investigation of the Carbon Influence on the Properties of Low-Carbon Steel by the Method of Measuring Internal Friction 136

Admetan, O.M. [Moscow Steel Institute]. The High-Temperature Internal Friction of Iron-Vanadium Alloys 146

AVRAAMOV, Yu.S.; MEZHENNAYA, S.O.

Effect of addition alloying with molybdenum on internal friction during the ordering of Ni₃Mn alloys. Izv.vys.ucheb.zav.; chern.met. no.5:102-105 '60. (MIRA 13:6)

1. Moskovskiy institut stali.
(Nickel-manganese alloys--Metallography)
(Molybdenum) (Internal friction)

MEZHENNIKOV, A., inzh.; KIZATOV, P., starshiy inzh. po tekhnicheskoy informatsii; GERASIMOV, Ye.; GORBANEV, V.; KOSTENKO, P.

Exchange of experience. Isobr.i rats. no.5:22 My '62.
(MIRA 15:5)

1. Byuro tekhnicheskoy informatsii Karbyuratornogo zavoda, Leningrad (for Mezhennikov). 2. Kombinat "Sikhali", pos. Tetyukhe, Primorskiy kray (for Kizatov). 3. Chlen prezidiuma oblastnogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov, g. Izkutek (for Gerasimov). 4. Sekretar' oblastnogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov (for Kostenko).
(Technological innovations)

MEZHENNIY, Ya.P. [Mezhennyi, I.A.P.]

Nitrogen-phosphorus-potassium fertilizer and chlorine-free
nitrogen-phosphorus-potassium fertilizer based on Kalush
potassium sulfate. Khim. prom. [Ukr.] no.2:44-45 Ap-Je '63.
(MIRA 16:8)

1. Ukrainskaya sel'skokhozyaystvennaya akademiya.

MEZHENNYI H.H.
VLADIMIRSKAYA, M.I.; MEZHENNYI, A.A.

Birds of Lake Kurgal'dzhin (northern Kazakhstan). Trudy Zool.
inst. 9 no.4:1199-1225 '52. (MLA 7:11)
(Kurgal'dzhin, Lake--Birds) (Birds--Kurgal'dzhin, Lake)

Inst Zoology. AS USIK

MEZHENNYI, A. A.

USSR/ Biology - Ornithology

Card 1/1 **Pub. 86 - 21/39**

Authors : **Lukina, E. V., and Meshenny, A. A.**

Title : **About some peculiarities of the biology of the cuckoo**

Periodical : **Priroda 44/3. 108 - 112, Mar 1955**

Abstract : **The author presents the results of observations of the habits and characteristics of the cuckoo. Illustrations.**

Institution : **Academy of Sciences of the USSR, I. P. Pavlov^Y Institute of Physiology**

Submitted : **.....**

MRZHENYIY, A.A.

Outbreak of *Aporia crataegi* L. (Lepidoptera, Pieridae) in Yakutia.
Ent.obozh.35 no.4:803-804 '56. (MLRA 10:2)

1. Yakutskiy filial Akademii nauk SSSR, Yakutsk.
(Lena Valley--Butterflies)

MEZHENNY, A.A.

Changes in the crown structures of larches (*Larix*) induced by *Tetrao parvinostris* Bp. Bot. zhur. 42 no. 1: 84 Ja '57. (MLRA 10:2)

1. Yakutskiy filial Akademii nauk SSSR, Yakutsk.
(Larch) (Grouse)

MEZHENNY, A.A.

Characteristics of growth and formation of dwarf Siberian pine trees
and shrubs in Southern Yakutia. Nauch. soob. IAFAN SSSR no.1:96-103
'58. (MIRA 17:1)

YEGOROV, O.V.; LABUTIN, Yu.V.; MEZHENNYI, A.A.

Material on the biology of the Siberian capercaillie. Trudy Inst.
biol. IAPAN SSSR no.6:97-105 '59. (MIRA 13:6)
(GROUSE)

MEZHENNY, A.A.

Biology of the nutcracker (*Nucifraga caryocatactes macro-*
rhynchus) in southern Yakutia. Zool. zhur. 43 no.11:1679-
1697 '64. (MIRA 18:11)

1. Zoologicheskiy institut AN SSSR, Leningrad.

MEZHENNY, A.M.

Epidemiology of leptospirosis in Mogilev Province. Trudy 1964: 58-59
'64. (MIRA 18:5)

MEZHENNY, A.M.

Results of examination of the population of Mogilev
Province for leptospirosis. Trudy TSIU 80:36-40 '65.

(MIRA 18:11)

MEZHENNY, A.M.

Results of examining animals for leptospirosis. *Vešetnik* 1965
42 no.11:39-40 W 165. (VI A 19:1)

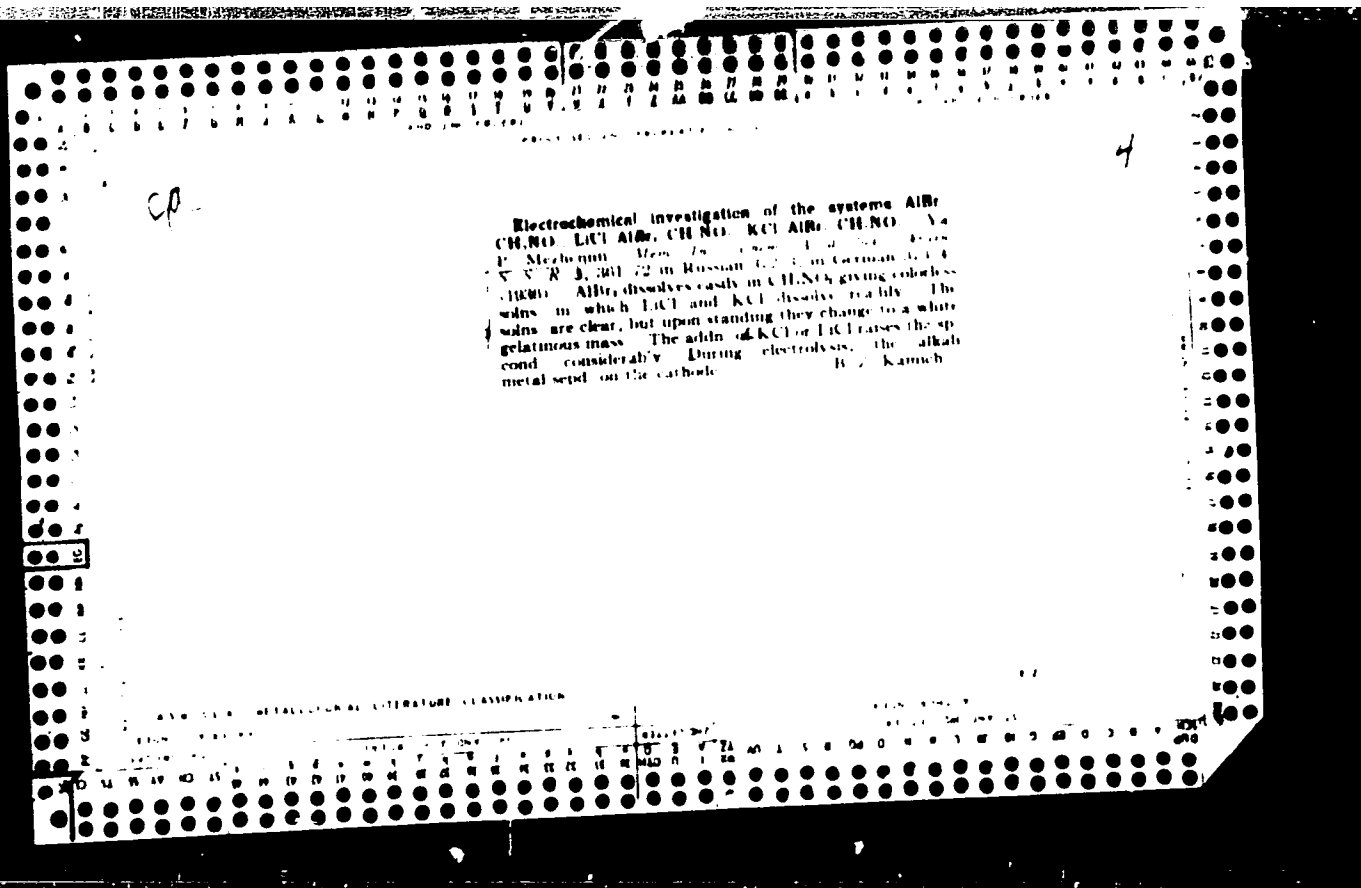
1. "Sentralnyy institut roversensitivnaya VT. 1965.

MEZHENNY, V.I., Inzh.; MARIWA, I.N., Inzh.

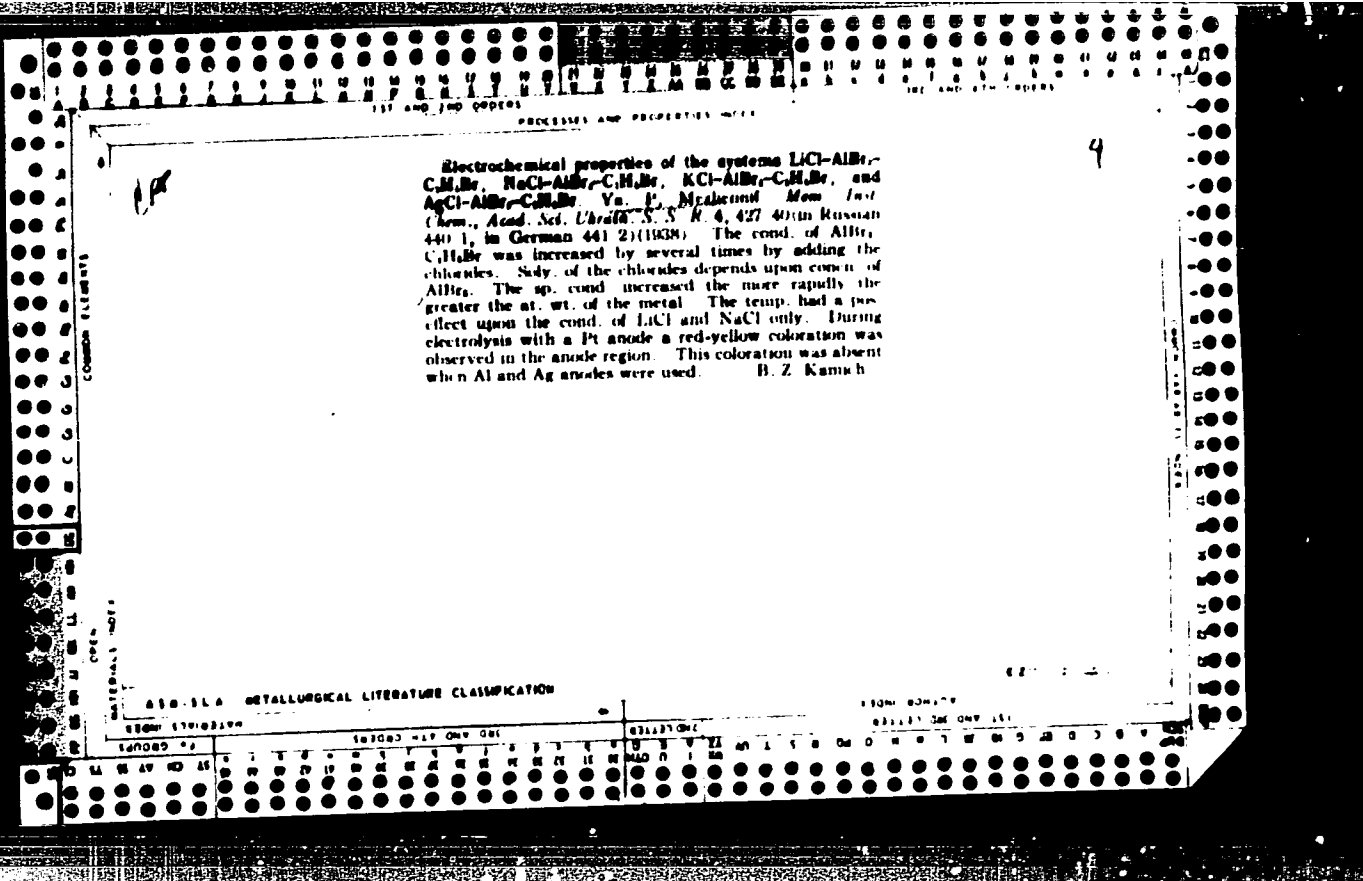
Design of a centralized control diagram for the parameters of
a diesel electric power plant. (In Russian) No. 51-54, 1974.
(YER 141)

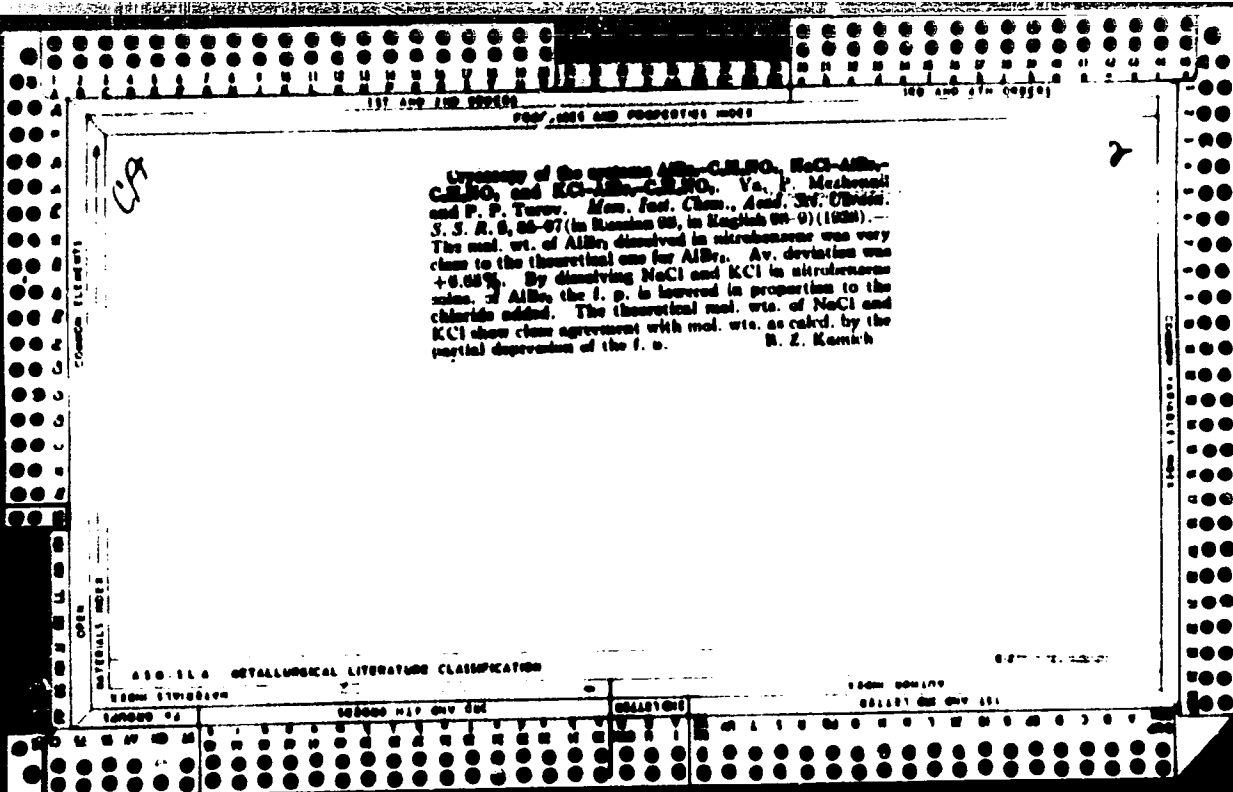
KRASIL'NIKOV, Boris Ivanovich; [illegible]
Ivanovich; [illegible]
refsenzo; [illegible]
nauka. [illegible]

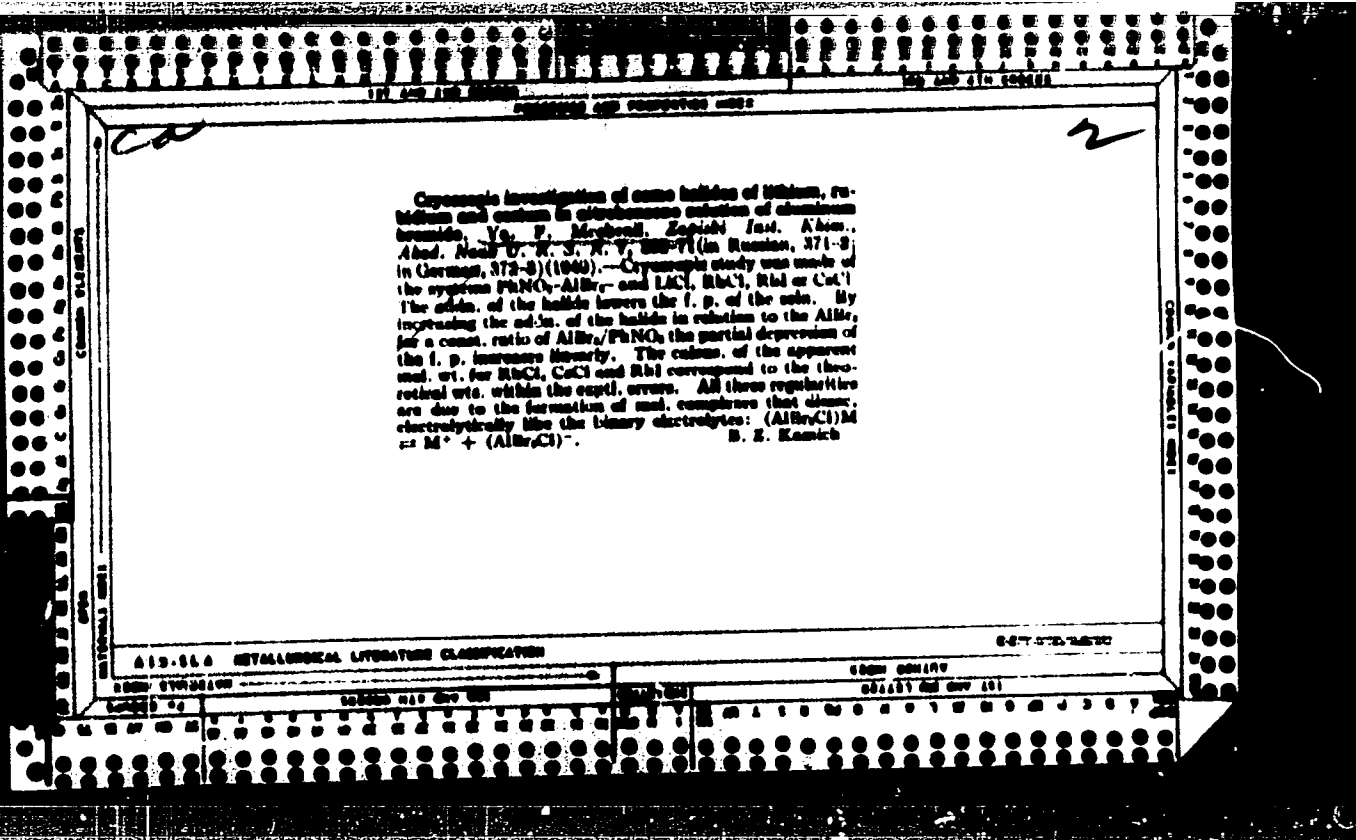
[Experience in the [illegible] of [illegible] diesel engines] [illegible] [illegible] [illegible]
m dizelno. [illegible] [illegible]

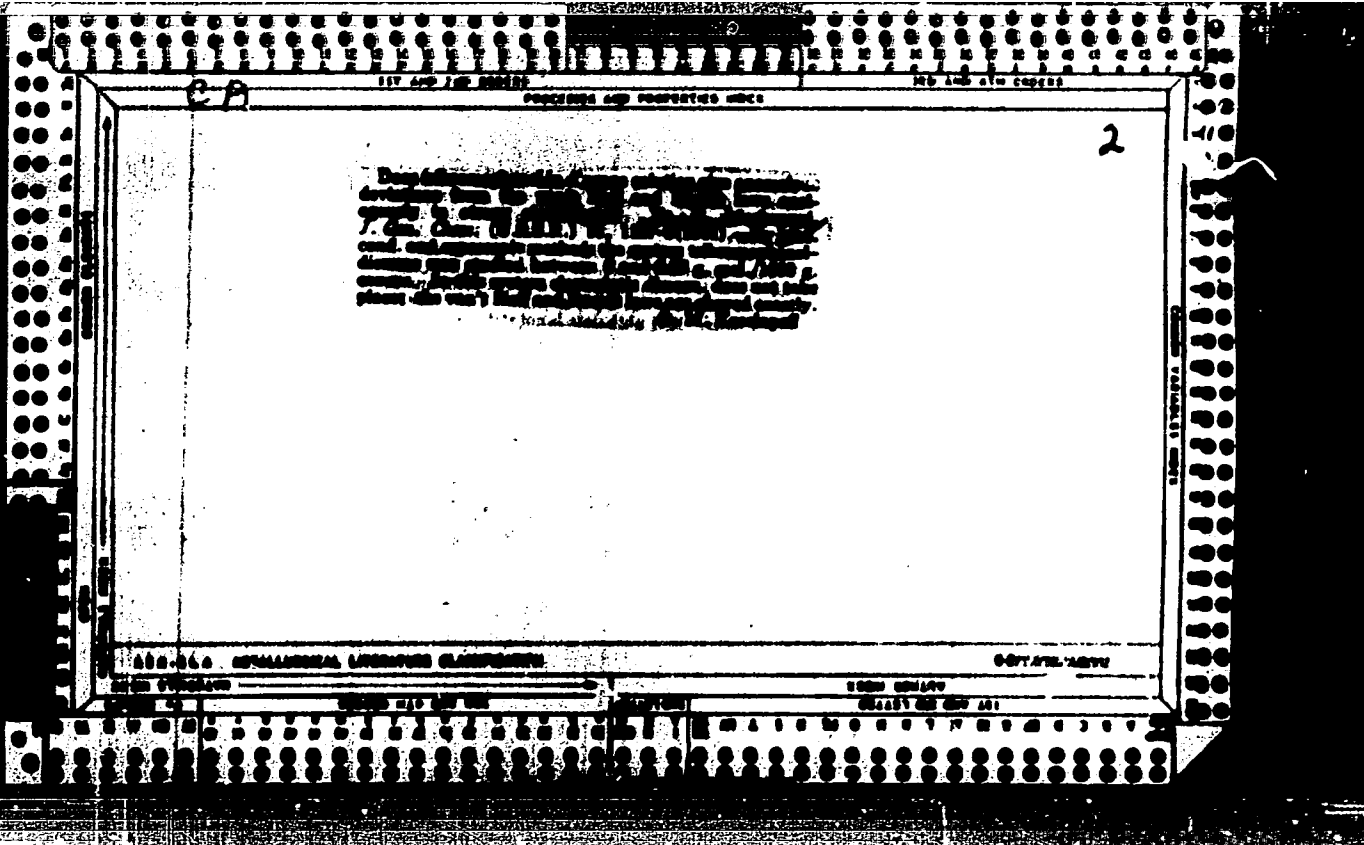


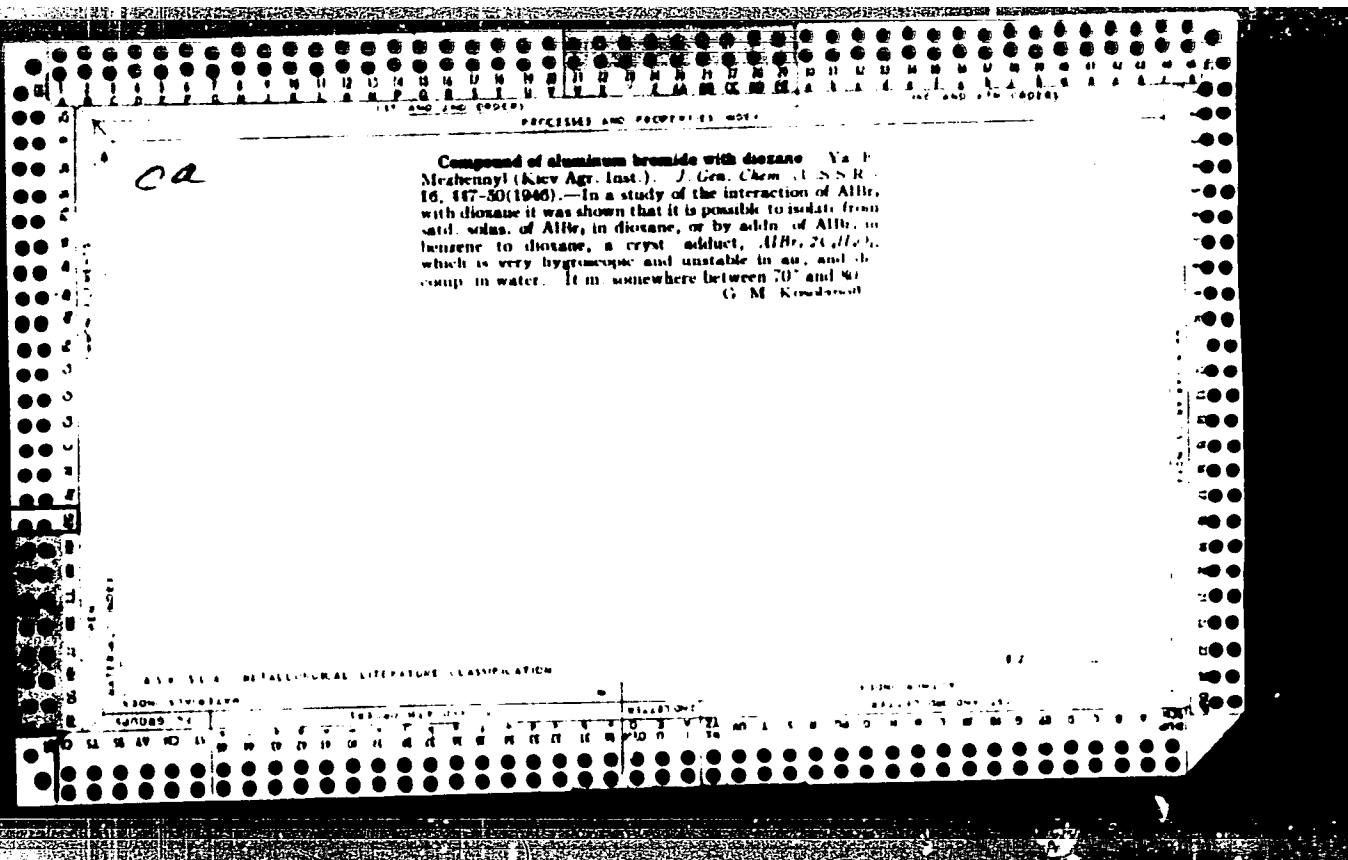
The electrochemical properties of the melts LiCl-AlBr, NaCl-AlBr, KCl-AlBr, and AgCl-AlBr. Ya. I. Muz'lovskii. *Mem. Inst. Chem. Acad. Sci. USSR* 1938, 4, 413 24 (in Russian 425, in German 425) 1938. C. A. 31, 61159. — By dissolving any one of the chlorides in AlBr₃ the cond. rises sharply. For the systems LiCl, NaCl and KCl the cond. is the greater the greater the mobility of the alkali metal ion. An increase in temp. had a pos. effect upon cond. Decompn. potentials were 1.1 v for LiCl, NaCl and KCl and 1.05 v for AgCl. Systems having Li, Na and K chlorides in AlBr₃ wp. Al on a Pt cathode and Be on the anode. With AgCl in AlBr₃ Ag w'pd. out on the cathode. B. Z. Kamnik











MEZH.NNYY, Ya. F.

PA 16782

USSR/Chemistry - Electrochemistry
Chemistry - Electrodes

Jun 1946

"The Electrode Potentials of Sodium and Potassium in Nitrobenzene," Ya. F. Mezhenny, 10 pp

"Zhur Fiz Khim" Vol XX, No 6

Article accompanied by diagrams of apparatus, chemical formulae used, and tables of results. Draws the following conclusions: (1) The electrode potentials of sodium and potassium in nitrobenzene solutions with aluminum bromide, potassium chloride and sodium, as well as sodium compounded with menstrua of nitrobenzene - benzene, were investigated; (2) Sodium and potassium similarly had regular electrode potentials in nitrobenzene solutions.

16782

Kiev Agric. Inst., Lab. Phys. + Colloid. Chem.

... of disperse systems. 1. Heat of wetting...
 ... starch of different molecular contents...
 ... wetting (Q with H_2O) over dry...
 ... $Q = 20.00$ cal./g. sample (20.00 cal./g. dry starch),
 ... $Q = 1.00, 0.25, 0.12, 10.20, 10.00, 10.00, 10.00,$
 ... $10.20 (17.10), 10.20 (11.07), 4.21 (8.01),$
 ... $2.90 (3.00), 1.00 (1.00), 0.00 (0.07)$. Log Q is very
 ... nearly a linear function of ω ; its extrapolation gives $Q =$
 ... 0 at $\omega = 25.7\%$, somewhat different from the less ac-
 ... curate earlier figures at high ω . On the assumption that
 ... the total surface energy is independent of the temp., and
 ... Q is independent of the temp. on complete wetting, and
 ... since, after wetting, the total surface energy of the solid
 ... is decreased by the amt. of the surface energy σ of the
 ... liquid, division of $Q = 20.00 \times 4.18 \times 10^7$ ergs (for dry
 ... starch) by $\sigma = 116$ ergs/sq. cm., gives for the sp. surface
 ... area of starch $S_s = 1.01 \times 10^8$ sq. cm./g., and for the
 ... thickness of the H_2O layer, $\delta = 3.5 \times 10^{-5}$ cm. A
 ... monomol. layer of (close-packed) H_2O of d. 1.84 would
 ... have a thickness of 3.8×10^{-5} , one of H_2O of normal d.,
 ... 3.44×10^{-5} ; consequently, δ is somewhat higher than
 ... normal d. is assumed for the adsorbed H_2O film, a signifi-
 ... cant Q is limited to a layer only slightly thicker than
 ... monomol. The sp. surface area per cc. is $S'_s = 0.7 \times$
 ... 10^{-7} sq. cm./cc. If the starch cells are assumed to be
 ... cubic, with a cell vol. 178×10^{-11} cc. (from x-ray data),
 ... the side of the cube is $l = 8.6 \times 10^{-4}$ cm.; hence the vol.
 ... of a cell outwardly wetted by H_2O , $V = 64 \times 10^{-10}$ cc.,
 ... the no. of $C_6H_{10}O_5$ cells $= 3.8 \times 10^9$, and the micellar wt.
 ... of cells $M = 8.80 \times 10^6$, consistent with $M = 8.8 \times 10^6$
 ... obtained by multiplying S'_s by the d. of starch and Ave-
 ... gadro's no., and at least of the same order as the figures
 ... obtained by other methods. For powdered gelatin, at
 ... 37° , $\omega = 0.00, 0.70, 0.47, 0.47, 10.40, 20.10, Q = 20.00,$
 ... $20.00, 15.45, 0.30, 1.15$ cal./g. dry gelatin, and for

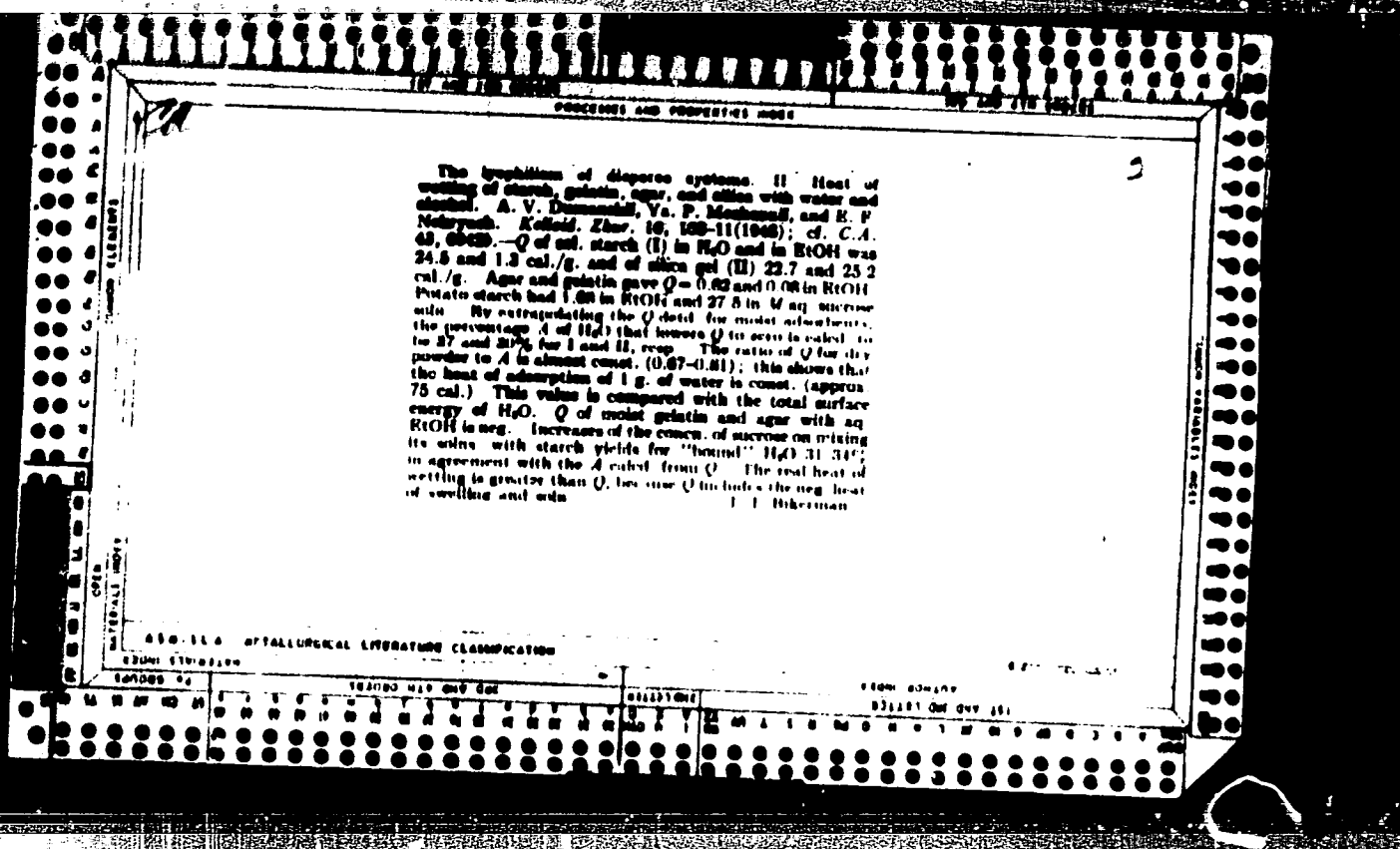
... $Q = 44.00, 20.10, 20.45, 11.50, 0.00, 3.54$ cal./g. dry
 ... starch; the linearly increasing log Q and ω leads to such curve.
 ... by the same calc. as above, one finds, for gelatin, $S_s =$
 ... 1.5×10^8 sq. cm., $S'_s = 0.30 \times 10^7$ sq. cm., $\delta < 3 \times$
 ... 10^{-5} cm., $l = 6.8 \times 10^{-5}$ cm., $V = 21.4 \times 10^{-10}$ cc., $M =$
 ... 20×10^6 , and for agar, $S_s = 1.6 \times 10^8$, $S'_s = 1.1 \times 10^7$,
 ... $l < 8.0 \times 10^{-5}$, $V = 10.0 \times 10^{-10}$, $M = 1.4 \times 10^6$.
 ... With regard to S_s , the order is starch $<$ gelatin $<$ agar,
 ... with respect to M , starch $>$ gelatin $>$ agar. The curve
 ... of the heat of wetting Q' of starch of different ω , with
 ... EtOH, is entirely different from the curve of wetting with
 ... H_2O . With $\omega = 0.00, 3.200, 7.067, 12.75, 14.21, 21.03,$
 ... $Q' = 1.093$ cal./g. sample (1.028 cal./g. dry starch),
 ... $1.004 (1.04), -0.213 (-0.274), -4.37 (-5.00), -2.74$
 ... $(-3.10), -1.043 (-1.210)$, i.e. Q' passes through a
 ... min. at a certain ω , and takes neg. values over a certain
 ... range of ω . This behavior is the result of a superposition
 ... of the heat of wetting by EtOH, predominant at low ω up
 ... to about 6%, of the (neg.) heat of desorption of H_2O
 ... in the range 6-25%, and of the (pos.) heat of soln. of H_2O
 ... in EtOH, prevailing at $\omega < 25\%$. A curve constructed
 ... by superposition of these effects has the same shape as the
 ... actual Q' curve. Desorption of H_2O as a result of wetting
 ... with EtOH was demonstrated directly by detns. of the
 ... loss of H_2O , and the presence of desorbed H_2O in the EtOH

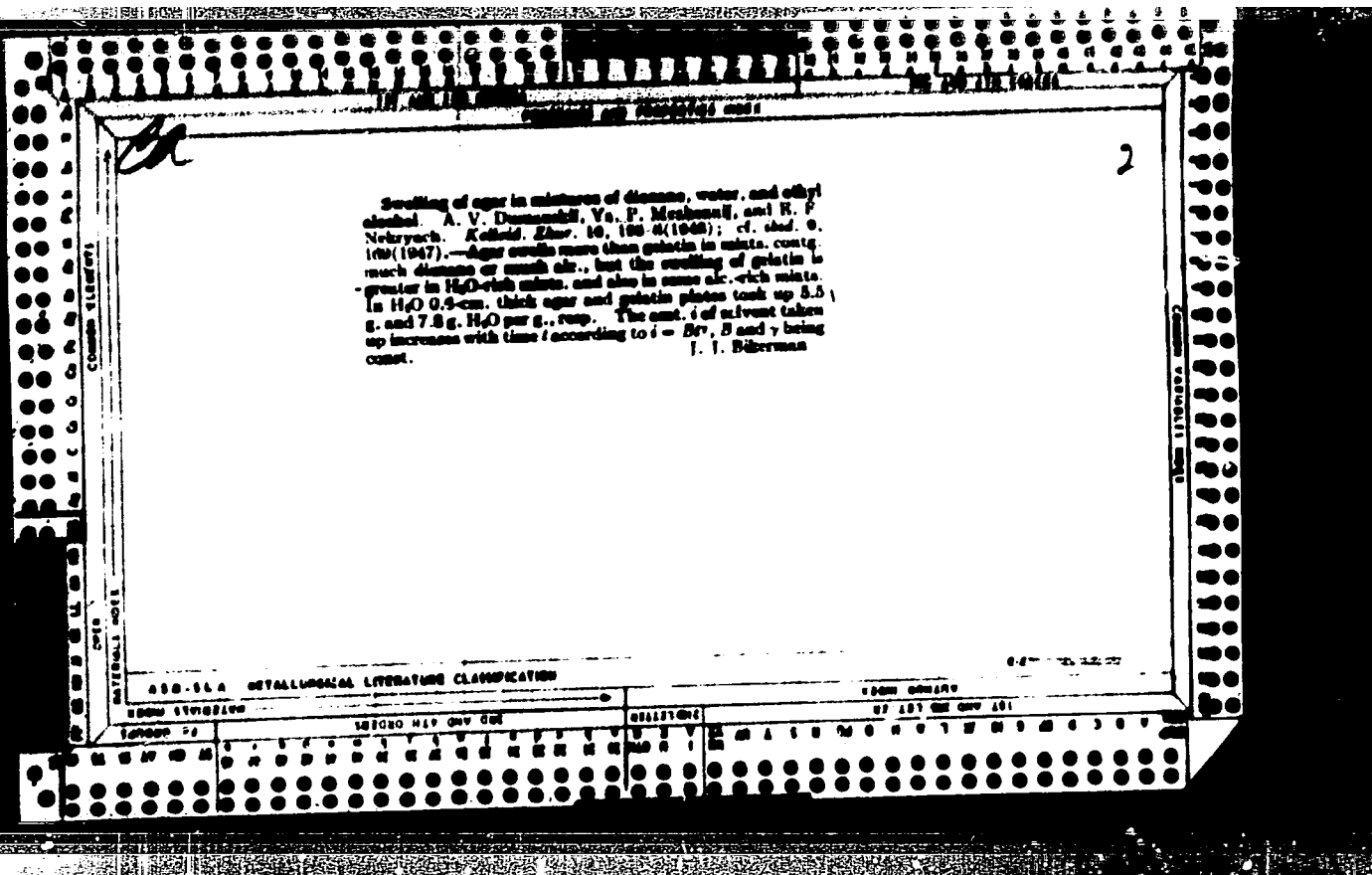
... was demonstrated by refractometry. The curve of the
 ... heat of wetting of dry starch in $H_2O + EtOH$ solns., in
 ... terms of the compn. of the wetting liquid, is S-shaped, Q
 ... falling with increasing EtOH content, first fairly rapidly
 ... (from 20 cal./g. for pure H_2O to 19 for 40% EtOH), then
 ... very slowly (from 19 to 17.5 cal./g.) between 40 and 80%
 ... EtOH, finally increasing abruptly, from 15 to 1.00
 ... cal./g. between 80% and 100% EtOH. The arrest in
 ... the 40-80% range corresponds to the existence of hydrates
 ... of the form $EtOH \cdot 2H_2O$.
 ... N. Thur

4

Electrode potentials in nonaqueous solutions. II.
The potentials of sodium and potassium in ethyl bromide
 Ya. P. Meshennil (Agr. Inst., Kiev) *J. Phys. Chem.*
 (U.S.S.R.) 21, 839-41(1947) (in Russian), *cf. C.A.* 41,
 37. The e.m.f. of the cell $Hg|Hg_2Cl_2$ in sat'd. KCl|solid
 AgBr|0.8 mole NaCl + 1 mole $AlBr_3$ in 50% mole $EtBr$,
 Na was 2.70 and 2.77 for two Na electrodes. Hence, the
 normal potential of Na is -2.46 v., i.e., less neg. than in
 H_2O . The e.m.f. of the cell $Hg|Hg_2Cl_2$ in sat'd. KCl,
 solid AgBr|0.4631 g. KCl + 0.188 g. $AlBr_3$ in 1:1
 of $EtBr$:KCl was 2.86 and 2.84 for two K electrodes.
 Hence, the normal potential of K is -2.51v., again less
 neg. than in other solvents. J. J. Bikerman

ASD 114 METALLURGICAL LITERATURE CLASSIFICATION





PA 67/49T43

MEZHENNY, YA. F.

USSR/Chemistry - Dioxane Systems
Thermal Analysis

Dec 48

"Dioxanate of Pyrosulfuric Acid: Thermal Analysis
of Dioxane Systems -- Pyrosulfuric Acid," Ya. F.
Meshenny, Chair of Chem, Kiev Agr Inst, 4 1/2 pp

"Zhur Obshch Khim" Vol XVIII, No 12

Makes a thermal analysis of the system, dioxane-
pyrosulfuric acid, stating the formula $H_2S_2O_7 \cdot$
 $2C_6H_{10}O_2$ for the compound which has a melting point
of 79.1.

67/49T43

MEZHENNY, YA. F.

PA 67/49T42

Chem/Chemistry - Dioxane
Sulfur Trioxide

Dec 48

"Cryoscopic Study of Solutions of Sulfuric Anhydride in Dioxane," Ya. F. Mezhenyy, Ye. A. Martynenko, Chair of Chem, Kiev Agr Inst, 24 pp

"Zhur Obshch Khim" Vol XVIII, No 12

Investigated solutions of SO_3 in dioxane by the cryoscopic method, and found the molecular weight of the solution to be about 160, depending on the concentration of the solution. The dissolved SO_3 is polymerized into S_2O_6 .

67/49T42

MEMBERTI, Ia. F.

The dioxane... pyrosulfuric acid. ... 30.

The... analysis. A diagram shows... system. Since on this diagram... is made concerning...

Chair of Chemistry of the
V. I. Lenin Institute
January 2, 1947

SC: Journal of General Chemistry (USSR) 22, (70) No. 10, (1947)

MEZHERYI, Ia. F.

Ia. F. Mezheryi and T. A. M. ..., ... of
sulfuric anhydride in hexane. ...

The experimentally found molecular weight, ... is
approximately 160; while the molecular weight of SO_2 is 64. On the basis of this,
the conclusion is drawn that the SO_2 molecules dissolved in hexane are associated
to S_2O_6 .

Chair of Chemistry of the
Kiev Agricultural Institute
March 1, 1947

SC: Journal of General Chemistry (USSR) 22, (20) No. 12, (1947)

2

CA

Thermal analysis of the system diosane-phosphoric acid. Ya. P. Kabanov (Kiev Agr. Inst., Ukraine) *Zhur. (Mikrokhim. 10, 404-6(1962); J. Gen. Chem. U.S.S.R. 10, 229-31(1962)* (Engl. translation); cf. C.A. 48, 6601c. The exptl. results and diagram show an about 1 mol. % has little effect on the f.p. of diosane; the acid is considered polymerized to 3 or 4 mol. per particle. Above -12°, the f.p. falls rapidly to the single eutectic at about -12°, 62 mol. % acid, and then rises steeply to the f.p. of the acid. Worden Waring

MEZHEVNYI, P. S.

Dissertation: "Physicochemical Investigation of Dioxane in Chloroform-Aqueous Solutions."
Dr Chem Sci, Inst of General and Inorganic Chemistry, Acad Sci, Ukraine, 1954.
Pravda Ukrainy, Kiev, 1954.

SC: JUM 124, 16 Nov 1954

MEZHENNY, Ya. F.

USSR.

Physicochemical investigation of dioxane-water solutions.
 VI. Dioxane solutions of hydrogen chloride. Ya. F. Mezhenny. *Zhur. Obshch. Khim.* 24, 1945-9(1954); cf. *G.A.* 44, 9230c. — HCl (I) dissolves in dioxane (II) to the extent of 46 mol. % at 20° and 49 mol. % at 12°. The process is exothermic with considerable evolution of heat. Equiv. cond. of dil. solns. of I is 10^{-4} ohm⁻¹, but at about 7 g. equiv./l. it is of the order of 10^{-2} . Cryoscopic study shows a higher mol. wt. than theoretical; this indicates assocn. of I mol. M.p. curve from pure II to approx. 12 mol. % I shows an almost linear character. V. N. B.

W. E. G. Head.

MEZHENNY, Ya. F.

Physicochemical investigation of dioxane-water solutions. VI. Electrical conductivity of dioxane-water solution of hydrogen chloride. Ya. F. Mezhenin. *Zhur. Obshchei Khim.* 23, 2137-22 (1954); cf. *C.A.* 49, 7330k. The specific cond. (α) and the equiv. elec. cond. (λ) of HCl in dioxane-H₂O soln. were measured at dielec. const. varying from 80 to 2.1. The value of λ of HCl solns. decreased regularly with the decrease in the dielec. const. of the medium. The explanation was that as the dielec. const. approaches 1, both α and λ approach 0. The calcd. values of λ showed satisfactory agreement with the exptl. data (*loc. cit.*).
E. M. Etkin

3000

MA
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MEZHENNY, Y. F.

✓ Physicochemical study of systems with dioxane. VIII. The system sulfuric acid-dioxane. Ya. F. Mezheny. Zhur. Obshchei Khim. 26, 375-7 (1956); cf. C.A. 49, 7330a. —The m.p. curve of the system H₂SO₄-dioxane (detd. up to 60 mol. % H₂SO₄) indicates the formation of one compd. H₂SO₄.C₄H₈O₂, m. 106-1°. The curve has one eutectic point at 14 mol. % H₂SO₄. The specific conductivities (κ) of solns. of H₂SO₄ in dioxane have max. at about 95% H₂SO₄ ($\kappa = 0.025$ at 25°) and fall off rapidly to small values at 60% H₂SO₄ ($\kappa = 0.002$ at 25°). H₂SO₄ in dioxane is a weaker electrolyte than is AcOH in water. Cryoscopic measurements do not point to the existence of simple ions of H₂SO₄ in this system. A. Ocone.

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MEZHENNY, Ya. F.

The physicochemical investigation of systems containing dioxane. X. Some physicochemical properties of dioxane solutions of pyrosulfuric acid. Ya. F. Mezhennit. *Zhne. Obshchei Khim.* 26, 1371-8(1950); cf. *C.A.* 51, 3371f. Pyrosulfuric acid reacts with dioxane to form $H_2S_2O_7 \cdot 2C_6H_{10}O_2$. The heat of reaction is 42,317 cal./mole. The specific cond. of the system increases with increase in temp. The decompn. potential of the system is 1.72 v. The specific cond. of $K_2S_2O_7$ -dioxane system at 50° is max. at 86 mole % $K_2S_2O_7$. Ariadna S. Ocene

MEZHENNY, Ya. F.

1 3

Chem The physicochemical investigation of systems containing
dioxane. I X. Some physicochemical properties of dioxane
solutions of pyrosulfuric acid. Ya. F. Mezhennii. *J. Gen.
Chem. U.S.S.R.* 26, 1545-8(1950)(English translation).
See *C.A.* 51, 3246b. B. M. R.

RM
mt

MEZHENNYX, Ya. F

USSR/ Physical Chemistry - Solutions. Theory of acids and bases

B-11

Abs Jour : Referat Zhur _ Khimiya, No 4, 1957, 11324

Author : Mezhenny Ya. FTitle : Physicochemical Investigation of Aqueous Dioxane Solutions
IX. Aqueous Dioxane Solutions of Sulfuric Acid

Orig Pub : Zh. obshch khimii, 1956, 26, No 8, 2149-2150

Abstract : Measured were specific electric conductivity κ and equivalent electric conductivity λ of 0.1 and 0.01 N solution of H_2SO_4 in water-dioxane mixtures having a dielectric constant (DC) of 12 and 37 in the interval 15-45°. Conductance of solutions is higher with greater amount of water in the solvent. At 25° and DC = 12 λ of 0.1 and 0.01 N solutions is 6.328 and 9.156; with increase of DC to 37 increases, respectively, to 51.84 and 48.75. With rise in temperature, and DC = 12, κ increases linearly, while with DC = 37 the increase in κ is more intensive but not as regular. Communication VIII see RzhKhim, 1957, 383

1/1

MEZHENNYI, Ya.F.

Connection between δ and η . Ukr.khim.zhur. 24 no.6:703-705 '58.
(MIRA 12:3)

1. Ukrainskaya akademiya sel'skokhozyaystvennykh nauk, kafedra
fizicheskoy i kolloidnoy khimii.
(Hydrochloric acid) (Electric conductivity)

~~MEZHENNYI, Yakov Filippovich; OZEROV, V.N., red.; PEVNER, V.I.,
tekh.red.; PROKOP'YEVA, L.N., tekh.red.~~

[Laboratory manual in physical and colloidal chemistry]
Laboratornyi praktikum po fizicheskoi i kolloidnoi khimii.
Moskva, Gos.izd-vo sel'khoz.lit-ry, 1959. 326 p.

(MIRA 12:11)

(Chemistry, Physical and theoretical--Laboratory manuals)
(Colloids)

SOV/76-33-3-7/41

5(4)

AUTHOR:

Mezhenny, Ya. F.

TITLE:

On the Dependence of λ_0 on η and D of the Medium (O zavisimosti λ_0 ot η i D sredy)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 3, pp 550 - 553 (USSR)

ABSTRACT:

In a previous paper (Ref 1) it was found that it is possible to represent in the case of constant viscosity of the solution the equivalent conductivity of diluted hydrogen chloride solutions in dioxane - water medium by an equation (1). A clearly marked chemical affinity of the solution, may, however, lead to deviations from (1). On the basis of a figure P_r , called Pisarzhevskiy-figure (Refs 2-4) and a newly derived equation

$$P_r = P_i e^{-k \frac{1}{\epsilon}}$$

(2) theories are put forward

which lead to the finding that the logarithms of P_r must be a linear function of the reciprocal value of the dielectric constant of the medium. According to this it ought to be

Card 1/2

On the Dependence of λ_0 on η and D of the Medium

SCV/76-33-3-7/41

possible for the value of limit conductivity to be expressed by the equation

$$\lambda_0 = \frac{P_1 e^{-k \frac{1}{\eta}}}{\eta} \quad (9)$$

Experimental results obtained on the electric conductivity of hydrogen chloride solutions in dioxane - water (Ref 5) and substituted ammonium salts in methanol ethanol and water (Ref 7), confirm the correctness of the equation (8). The assumption that $\lambda_0 \eta = \text{const}$ (Ref 8) is not confirmed. There are 4 figures, 1 table, and 8 references, 6 of which are Soviet

ASSOCIATION:

Ukrainskaya akademiya sel'skokhozyaystvennykh nauk, Kiyev
 (Ukrainian Academy of Agricultural Sciences, Kiyev)

SUBMITTED:

February 16 1957

Card 2/2

APPENDIX 2.7.

Reply to the letter of E. IA. ... on the constant value
of ρ_{sp}/c a product of limiting equivalent conductance and
viscosity of solvents. Zhur.fiz.khim. 35 no.11:2(4)-
2651 R 161. (MIRA 14:12)

1. ... (electrolyte solutions)

S/070/60/030/006/011/033/XX
B001/B055

AUTHORS: Mezhenny, Ya F. and Kovganich, N Ya

TITLE: Physicochemical Investigation of Systems Containing Dioxane.
XII A New Method of Synthesizing Sulfur-trioxide Dioxanate

PERIODICAL: Zhurnal obshchey khimii. 1960. Vol 30. No 6. pp 1755-1757

TEXT: Sulfonation of organic compounds by means of complex compounds of SO_3 is becoming of increasing theoretical and practical importance. Of great interest in this respect is dioxane sulfotrioxide, which was suggested as a sulfonating agent for the sulfonation of various aromatic compounds (Ref 4). For this purpose, two dioxanates, $\text{O}(\text{CH}_2\text{CH}_2)_2\text{OSO}_3$ and $\text{O}_3\text{S}(\text{CH}_2\text{CH}_2)_2\text{OSO}_3$, were precipitated from carbon tetrachloride and ethylene chloride solutions. C. M. Suter (Ref 4) points out that the synthesis of the dioxanates of sulfur trioxide by direct reaction of the two components involves considerable difficulties due to the occurrence of "strong charring". In order to avoid the latter, C. M. Suter first dissolved dioxane in an inert solvent (carbon tetrachloride or ethylene chloride)

Card 1/2

Physicochemical Investigation of Systems
Containing Dioxane XII. A New Method of
Synthesizing Sulfur-trioxide Dioxanate

S/079/60/030/006/011/033/XX
B001/B055

and, on passing sulfur trioxide into the solution obtained the dioxanates as white flaky precipitates. The present work was undertaken to investigate whether the dioxane complexes of sulfur trioxide might not be obtained by a reaction without a solvent and in the gaseous instead of the liquid state. The complexes of dioxane and SO_3 were synthesized by a direct reaction of dioxane and sulfur trioxide, both in the vapor state, in a manner that excluded charring of the final product. According to analytical data, the ratio of the components (SO_3 and dioxane) in the complex is 2:1. The formation rate of the above complex can be regulated by varying the evaporation rate of dioxane and sulfur trioxide by temperature change. There are 1 table and 5 references: 4 Soviet and 1 US.

ASSOCIATION: Ukrainskaya akademiya sel'skokhozyaystvennykh nauk
(Ukrainian Academy of Agricultural Sciences)

SUBMITTED: June 11, 1959

Card 2/2

S/073/63/029/002/002/006
A057/A126

AUTHOR: Mezhenny, Ya. F.

TITLE: Investigation of the solubility and viscosity of natural rubber
in dioxane

PERIODICAL: Ukrainskiy khimicheskij zhurnal v. 29, no. 2, 1963, 162 - 164

TEXT: The aim of the present work is to demonstrate that not only nitro-
- and benzyl-cellulose, but also natural rubber can form true, thermodynamically
stable solutions with a certain rubber concentration corresponding to each tem-
perature. Swelling was studied with 0.5 g rubber in 10ml dioxane, gasoline, and
toluene. The process was characterized by the absorption of the liquid in the rub-
ber and the absorption of the rubber particles by the liquid. The second process
does almost not occur in dioxane. Rubber has a limited swelling capacity in diox-
ane ($\lambda = 150\%$). The experiments concerning the solubility of natural rubber in
dioxane showed that rubber, similar to other substances with low molecular weight,
dissolves reversibly in dioxane. Heating of the supersaturated solution effects
dissolving of the precipitate, while subsequent cooling precipitates the rubber

Card 1/2

Investigation of the solubility and...

S/073/63/029/002/002/006
A057/A126

again. A rubber concentration of 4.5% gives non-saturated solutions above 35°C and supersaturated solutions below this temperature. The solubility of rubber in dioxane increases about ten times with a temperature rise from 15 to 30°C. The viscosity of a 4.5% rubber solution in dioxane was investigated in the range of 25 - 50°C and it was observed that at 25°C and below there starts precipitation of rubber flakes. The viscosity decreases from 0.36 (35°C) to 0.17 (50°C) with rising temperature. There are 4 tables.

ASSOCIATION: Ukrainskaya sel'skokhozyaystvennaya akademiya (Ukrainian Agricultural Academy)

SUBMITTED: September 10, 1961

Card 2/2

182048YY Ya.F.

Relation between ...
the ...
P ...
...

S/126/63/015/002/020/033
E193/E383

AUTHORS: Skakov, Yu.A. and Mezhennyy, Yu.O.

TITLE: Stacking faults and segregation in Cobalt-base alloys

PERIODICAL: Fizika metallov i metallovedeniye, v. 15, no. 2, 1963, 280 - 284

TEXT: Two alloys of the K40HXM (K4ONKhM' type (approximately 40% Co, 20% Cr, 14% Fe, 16% Ni, 4% Mo) with a high (0.1%) and low (0.05%) carbon content were used as the experimental materials. The displacement of the peaks of the (111) and (200) lines, diffracted by a face-centered cubic lattice of the solid solution, was studied to determine the concentration of the stacking faults in filings produced at room temperature and then annealed at 400 - 700 °C. These experiments were supplemented by determining the position of the centre of gravity of the (111) line. Typical results obtained for the 0.1% C alloy are reproduced in Fig. 1, showing the profile of the (111) lines of specimens in the following condition: a) quenched; b) quenched and deformed (by filing); B, 2, 3) quenched, deformed and then

Card 1/3

S/126/63/015/002/020/053
E193/E385

Stacking faults

annealed at 400, 500 and 600 °C, respectively; P and G indicate, respectively, the position of the peak and the centre of gravity of the line. Conclusions: 1) plastic deformation of alloys of the K40NKhM type at room temperature brings about the formation of a large quantity (up to 7%) of stacking faults. The carbon content of the alloy has no significant effect on the probability of the formation of the stacking faults which is, however, increased in the presence of Mo and Cr. 2) The hardness of specimens deformed at room temperature increases after annealing at low (up to 500 °C) temperatures. This effect has been attributed to the segregation in the vicinity of the stacking faults; thus, for instance, in the case of an alloy with a nominal Mo content of 7%, the concentration of this element in the region of hexagonal stacking has sometimes been found to be 20%. 3) After high-temperature annealing accompanied by the precipitation of carbides, stacking faults disappear, the alloy becomes homogeneous and its hardness decreases. There are 2 figures and 1 table.

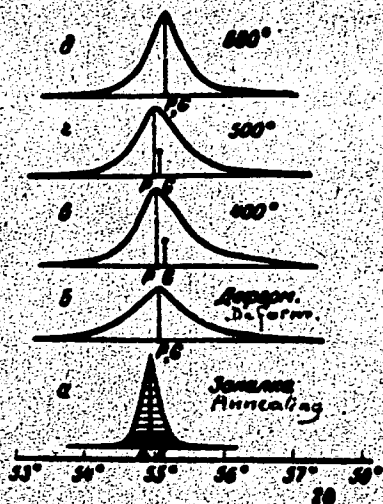
ASSOCIATION: Moskovskiy institut stali i splavov (Moscow
Institute of Steel and Alloys)

Card 2/3

S/126/63/015/002/020/033
E193/E383

Stacking faults

Fig. 1:



Card 3/3

SKAKOV, Yu.A.; MEZHENNY, Yu.O.; YEDN'RAL, N.V.

Defects of packing and segregation in cobalt-base alloys.

Fiz. met. i metalloved. 1' no.5:773-774 My '64.

(MIRA 17:9)

1. Moskovskiy institut stali i splavov.

S/704/61/000/002/005/006
D201/D302

AUTHORS: Golembiovskiy, P.S. and Mezhennyy, Yu. Ya., Engineers
TITLE: A thyatron time relay for relay protection and system automation

SOURCE: Ukraine. Gosudarstvennaya planovaya komissiya. Institut avtomatiki. Avtomatizatsiya i priborostroyeniye; sbornik nauchnykh trudov, no. 2, Kiyev, 1961, 139-146

TEXT: The authors described a thyatron time relay developed by them at the Institute of Automation. The relay is intended for relay protection systems, has a small power consumption, good temperature stability and has no mechanical moving parts. The main component used is a cold cathode thyatron MTX-90 (MPKh-90), although other types of cold cathode thyatrons may be used. The principle of operation is the discharge of a capacitor. The capacitor is connected at the bottom end of a potentiometer, whose upper part consists of a variable resistor connected to an HT rail. Limiting resistor connects the thyatron grid to the RC junction. The

Card 1/3

A thyatron time relay ...

S/704/61/000/002/005/006
D201/D302

thyatron has in its anode circuit an interval d... relay which is able to switch considerable powers. The re-setting of the relay is achieved by connecting a semi-conductor diode parallel to the variable resistance of the RC potentiometer chain. With the control signal applied (i.e. with application of the voltage to the circuit), the diode is biased in reverse at its cathode by the positive potential of the HT rail. When the control signal is removed, the diode anode, connected to the charged capacitor of the thyatron grid circuit, becomes more positive than its cathode, the diode conducts and the capacitor in the grid circuit discharges quickly through the resistor of the RC chain and the resistances of the supply filter and the thyatron anode current limiting resistor. The relay may be d.c. or a.c. operated, the only difference being a bridge rectifier incorporated between the a.c. supply and the thyatron circuit. Laboratory experiments with the above type of d.c. or a.c. operated time relay have shown the following. The relay consumes little power and has a small spread of operating time characteristics (less than ± 0.1 sec.), it has a good temperature stability; permits a large number of operations (0.5 - 1 million) and easy changes of its range by a simple change of the RC network

Card 2/3

A thyatron time relay ...

S/704/61/000/002/005/006
D201/D302

components. It is concluded that it is possible to have a time relay operating for 0-4, 0-10 and 0-20 sec., i.e. at all time interval ranges used in relay protection. There are 5 figures and 10 references: 9 Soviet bloc and 1 non-Soviet bloc

Card 3/3

MEZHERA, A. V.

"Some Reactions to Direct Irritation of the Brain Stem, the Dependence of Their Course on the Activity of the Cerebral Cortex." Cand Med Sci, Rostov Medical Inst, Rostov-na-Donu, 1954. (RZhBiol, No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

MEZHERA, A.V.

Correlation between the cerebral cortex and lower portions of the central nervous system. Zhur. vys. nerv. deiat. 4 no.2:258-266
Mr-Ap '54. (MLRA 7:10)

1. Kafedra normal'noy fiziologii Rostovskogo-na-Donu gosudarstvennogo meditsinskogo instituta.
(CEREBRAL CORTEX, physiology.
relation to other parts of CNS)
(CENTRAL NERVOUS SYSTEM, physiology.
relation of various parts to CNS)

MEZHERA, A.V.

Effect of removal of motor zones of the cerebral cortex on the cerebellar stimulation. Fiziol.sbur. 46 no.6:672-676 Je '60.

(MIRA 13:8)

1. From the Chair of normal physiology, Medical Institute, Rostov-on-Don.

(CEREBRAL CORTEX)

(CEREBELLUM)

MEZHERA, A.V. (Rostov-na-Donu); KHAYUTIN, V.M. (Moskva)

Some mechanisms of the effect of hypertonic solutions of
glucose and sodium chloride on the cardiovascular system.
Pat. fiziol. i ekspt. terap. n. no. 3:28-32 My-Je'62

(MIRA 17:2)

1. Iz kafedry normal'noy fiziologii (zav. - prof. N.V. Danilov)
Rostovskogo meditsinskogo instituta i Instituta normal'noy
i patologicheskoy fiziologii (direktor - deystvitel'nyy
chlen AMN SSSR prof. V.V. Parin) AMN SSSR.

MEZHERETSKIY, A.D.

Designing reverse turbines. Sudostroenie 27 no.11:24-28
N '61. (MIRA 15:1)
(Marine engines)

MEZHERETSKIY, A.U. (Rostov-na-Donu)

Current evaluation of the knowledge of students. Mat.v shkole
no.6:53-54 N-D '57. (MIRA 10:11)
(Mathematics--Study and teaching)

CA MEZHERICHER, M.

Dependence of the intensity of spectral lines on the concentration of the element in the flame. N. N. Sobolev, E. M. Mezhericher, and G. M. Reulin. *Izv. Akad. Nauk S.S.S.R., Ser. Fiz.* 14, 737 (1950). The total energy of spectral lines emitted by alkali and alk earth metals in $C_{11}H_8$ flames is at all concns. proportional to the concn. and at large concns. proportional to the \sqrt{c} . From contour measurements the abs. width of line Na 5890 Å. was found to be 0.085 Å.; that of line Ca 4227, 0.08 Å. At higher concns the contour increases owing to internal conversion. S. P.

CA

ME ZHERICHER, M.

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Dependence of the intensity of spectral lines on the concentration of the element in the flame. N. N. Sobolev, R.

M. Mezhericher, and G. M. Rodin. *Zhur. Eksp. Teor. Fiz.* 21, 351-60 (1951). See C.A. 45, 4134d. K. L. C. Certain forbidden spectral lines of cadmium. John R. Holmes and Fernand Delaune (Univ. of S. California, Los Angeles). *J. Optical Soc. Am.* 42, 77 (1952). An experimental investigation was made to establish conclusively the source and nature of the highly forbidden lines 3331 Å. ($5^1 S_0 - 5^1 P_1$), 3141 Å. ($5^1 S_0 - 5^1 P_1$), and 3103 Å. ($5^1 P_1 - 5^1 D_2$) in Cd. All such transitions are strictly forbidden for electric dipole radiation and by most of the selection rules for higher-pole and magnetic dipole radiation. Bowen and others, have suggested that the lines are emitted as the result of the interaction of the optical electron with the magnetic moment of the nucleus and are therefore produced by only the odd weighted isotopes. The intensities of the above-mentioned lines as emitted by a Cd sample that contained 2.06 times the quantity of odd isotopes contained in natural Cd were compared with the intensities of the same lines emitted by natural Cd. Within the experimental error it was found that the forbidden lines are emitted with an intensity proportional to the odd isotope abundance and, therefore, it seems conclusively established that they arise only from the odd isotopes. The intensities of some of the forbidden lines were compared with the intensity of an allowed transition from the same multiplet in order to give a measure of the interaction of the optical electron with the nuclear magnetic moment. William F. Meggers

MEZHERICHER, Ye.G.

Geography evening of friendship. Geog.v shkole 24 no.6:62-65
N-D '61. (MIRA 14:10)

1. 28-ya shkola Moskvu.
(Geography--Study and teaching)

MEZHERICHER, Ye.G.

Geographical evening on the topic "Africa must be free." Geog. v
shkole 25 no.2:63-65 Mr-Ap '62. (MIRA 15:2)

1. 728-ya shkola Moskvya. (Africa--Politics)

SAVRANSKIY, K.Ye., insh.; MEZHERITSER, A.B., insh.

Equipment for the cutting of scrap metal. Met. i gornorud.
prom. no.1:70-72 ~~Je-F~~ '62. (MIRA 16:6)

1. ~~Proyektno-konstruktorskiy~~ tekhnologicheskii institut
Dnepropetrovskogo soveta narodnogo khozyaystva.
(Scrap metals) (Metal cutting)