

SOV/159-58-5-29/35

Dielectric Losses in Muscovite Mica with Mineral Inclusions of Biotite&Limonite

bridge, and at high frequencies by the method of resistances (Ref.9). Electrodes were made of Wood's alloy or of silver. Qualitative structural analysis was based on Laue patterns obtained after heating to 400, 600 or 800°C. All experiments were made on monocrystals. Figs.1-2 show the temperature dependences of $\tan \delta$ and ϵ of pure muscovite after various heat treatments (Fig.1) and at various frequencies after heating to 600°C (Fig.2). The loss of water by pure muscovite (Curve 1) and of muscovite with biotite is shown in Fig.3. The temperature dependences of $\tan \delta$ and ϵ of muscovite with biotite and limonite are shown in Figs.4 and 5 respectively. In pure muscovite and in muscovite with biotite and limonite the author found the relaxation maxima of $\tan \delta$, due to the molecules of the water of crystallisation, The unusual displacement of the temperature maximum of $\tan \delta$ with change of frequency is due to the peculiarities of the structure of mica. Thermal treatment of muscovite with biotite consisting of heating to 600-800°C and of mica with limonite, heating to 400°C, improves their dielectric properties by

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Dielectric Losses in Muscovite Mica with Mineral Inclusions of
Biotite&Limonite

driving off some of the water in them. Acknowledgements are made to K. G. Vodop'yanov, who directed this work. There are 5 figures and 16 references, of which 14 are Soviet and 2 are English.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V. V. Kuybysheva (Siberian Physico-technical Institute at Tomsk State University imeni V. V. Kuybyshev).

SUBMITTED: April 17, 1958.

Card 3/3

VODOP'YANOV, K.A.; VOROZHITSOVA, I.G.

Effect of exposure to gamma radiation on dielectric losses in mica. Izv.vys.ucheb.zav.;fiz. no.1:48-51 '62. (MIRA 15:6)

1. Sibirskiy fiziko-tehnicheskii institut pri Tomskom gosudarstvennom universitete imeni Kuybysheva.
(Dielectrics, Effect of radiation on)
(~~Mica~~-Electric properties)
(Gamma rays)

VORZHTSOVA, I.G.

Problem of the nature of dielectric losses in mica. *Izv.vys.ucheb.*
zav.;fiz. no.1:25-31 '62. (MIRA 15:6)

1. Sibirskiy fiziko-tekhnicheskii institut pri Tomskom
gosudarstvennom universitete imeni V.V. Kuybysheva.
(Dielectric loss)
(Mica—Electric properties)

VOROZHTSOVA, I. G.

Vodop'yanov, K.A. and I.G. Vorozhtsova. [Tomsk, Sibirskiy fiziko-tekhnicheskii institut (Siberian Institute of Physical Technology)] "Dielectric Losses in Mica Muscovite With Mineral Embeddings of Limonite and Biotite at High Frequency."

(The Physics of Dielectrics; Transactions of the All-Union Conference on the Physics of Dielectrics) Moscow, Izd-vo AN SSSR, 1958. 245 p. 3,000 copies printed.

This volume publishes reports presented at the All-Union Conference on the Physics of Dielectrics, held in Dnepropetrovsk in August 1956, sponsored by the "Physics of Dielectrics" Laboratory of the Fizicheskii institut imeni Lebedeva AN SSSR (Physics Institute imeni Lebedev of the AS USSR), and the Electrophysics Department of the Dnepropetrovskiy gosudarstvennyy universitet (Dnepropetrovsk State University).

VOROZHTSOVA, I. G.,

I. G. Vorozhtsova (SFTI) found relaxation maxima in muscovite. They are assumed to be connected with the peculiarity of structure.

Report presented at a Conference on Solid Dielectrics and Semiconductors,
Tomsk Polytechnical Inst., 3-8 Feb. 58.
(Elektrichestvo, '58, No. 7, 83-86)

VOROZHTSOVA, I.G.
VODOP'YANOV, K.A.; VOROZHTSOVA, I.G.

Dielectrics losses at high frequencies in muscovite mica with
mineralogical inclusions of limonite and biotite. Izv. AN SSSR.
Ser. fiz. 22 no.3:283-287 Mr '58. (MIRA 11:4)

1. Sibirskiy fiziko-tekhnicheskii institut pri Tomskom gos.
universitete im. V.V. Kuybysheva.
(Dielectrics)

AUTHOR: Verozhtsov, B. I.; Glikmanovaya, N. I.; Verozhtsova, I. B.

TITLE: Dielectric properties of insulating materials exposed to gamma radiation

SOURCE: Izv. VUZ. Fizika, no. 2, 1963, 75-77

TOPIC TAGS: polyethylene terephthalate, lavsan, hostaphan, terrylene, gamma irradiation, dielectric property

ABSTRACT: Test runs have been made of three brands of the polymer polyethylene terephthalate: the Soviet-made lavsan, the German-made hostaphan, and the British-made terrylene. Dielectric constant and permittivity were measured as functions of gamma radiation of up to 1000 r/min; the external electromagnetic field frequency varied from 100 to 10000 Hz. Temperature range from 20 to 100°C. It is shown that while the dielectric constant and resistivity sharply increase with increasing temperature, the dielectric loss of resistivity, on the other

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L 10515-63
ACCESSION NR: AF3000930

brands, lvsan was found to be least resistant to gamma radiation with respect to the loss tangent and resistivity. This is due to its crystalline structure. Permittivity was unaffected by exposure. Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V. V. Kuybyshcheva (Siberian Physicotechnical Institute at the Tomsk State University)

SUBMITTED: 30Dec62


DATE ACQ: 11Jun63

ENCL: 00

SUB CODE: MA, PH

NO REF SOV: 001

OTHER: 001

is/ 
Card 2/2

L 10515-61
ACCESSION NR: AP3000930
S/0139/63/000 002 0075/0077

AUTHOR: Vorozhtsov, B. I.; Ol'shanskaya, N. I.; Vorozhtseva, I. O.

76
77
15

TITLE: Dielectric properties of insulating materials exposed to gamma radiation

SOURCE: Izv. VUZ. Fizika, no. 2, 1963, 75-77

TOPIC TAGS: polyethylene terephthalate, lavsan, hostaphan, terrylene, gamma irradiation, dielectric property

ABSTRACT: Test runs have been made of three brands of the polymer polyethylene terephthalate: the Soviet-made lavsan, the German-made hostaphan, and the British-made terrylene. Dielectric loss tangent and permittivity were measured as functions of gamma radiation of up to 2000 r/min; the external electromagnetic field frequency varied from 20 to 10⁵ cps and temperature ranged from 10 to 130C. In addition, the effect of various climatic conditions on the response of conductivity to irradiation time was measured at -60, 20, 150 (maximum operating temperature), and 40C in conjunction with 98% humidity (tropical conditions). It was shown that while the loss tangent rises and resistivity sharply drops upon exposure, neither depends upon dosage, and both return to normal after exposure. Increased temperature decreases the return rate of resistivity. Of the three

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L 10515-63

ACCESSION NR: AP3000930

brands, lavesan was found to be least resistant to gamma radiation with respect to the loss tangent and resistivity. This is due to its crystalline structure. Permittivity was unaffected by exposure. Orig. art. has: 4 figures and 2 tables.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskii institut pri Tomskom gosuniversitete imeni V. V. Kuybyshcheva (Siberian Physico-technical Institute at the Tomsk State University).

SUBMITTED: 30Dec62

DATE ACQ: 11Jun63

ENCL: 00

SUB CODE: MA, PH

NO REF SOV: 001

OTHER: 001

ls/ 
Card 2/2

VOROZHTSOVA, N. Ya., Cand Med Sci -- "Certain indicators of ^{the} reactivity of healthy and measles-~~sex~~^{affected} children according to data, ^{of} ~~supplied by~~ the blood picture, phagocytic activity of leucocytes, and leucopedesis in the oral cavity." Kuybyshev, 1961. (Kuybushev State Med Inst) (KL, 8-61, 259)

- 446 -

ACC NR: AT6036532

SOURCE CODE: UR/0000/66/000/000/0123/0124

AUTHOR: Govorun, R. D.; Vorozhtsova, S. V.

ORG: none

TITLE: Investigation of the effects of 126-Mev protons and Co sup 60 gamma rays on bone marrow cell division in white rats [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966.]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 123-124

TOPIC TAGS: proton radiation biologic effect, ionizing radiation biologic effect, relative biologic efficiency, radiation homatologic effect, radiation genetic effect, rat

ABSTRACT: The RBE of 126-Mev protons and Co⁶⁰ gamma rays was determined for white rats using the following indices: dynamics of mitotic activity, destructive processes in nuclei of bone marrow cells, and disruption of cell division. Male white rats weighing 170-200 g were subjected to a single whole-body irradiation with protons from an OIYAI synchrocyclotron or gamma rays from an EGO-2 apparatus in doses of 100, 200, 400, 550, 700, and 1000 rad. Animals (650 in all) were decapitated 1, 3, 6, 12, and

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ACC NR: AT6036532

24 hr, and 2, 4, 7, 12, 20, and 30 days after irradiation. Bone marrow extracted from femurs was examined microscopically; the mitotic index, number of cells with degenerate nuclei, and the number of chromosome aberrations were computed.

Experimental results showed a clear dose dependence of change of the mitotic index in bone marrow in different periods after irradiation. Irradiation caused considerable increase in the number of metaphases in the first 6-48 hr after irradiation, with a maximum at 3 hr, and also a decrease in the number of prophase and anaphase in the first 24 hr. A clear dose dependence of change in the number of cells with degenerate nuclei in the first two days after irradiation was demonstrated. Considerable increase in the number of these cells was observed in the first days after irradiation, with a maximum at 3 hr. Protons had a less injurious effect on degeneration of cell nuclei than gamma rays. A clear dose dependence of change in the number of cells with chromosome aberrations in different periods after irradiation was noted. It was concluded that the RBE of 126-Mev protons (as compared with Co⁶⁰ gamma-rays) differed depending on the periods of investigation and the tests used. [W. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 2/2

PASTUKHOVA, I. A.; VOROZHTSOVA, V. G.

Use of the vacuum extractor at the Pskov Maternity Home and its influence on the physical development of children. Akush. i gin. (MIRA 14:12) no.3:13-15 '61.

1. Iz Pskovskogo roditel'nogo doma (glavnyy vrach M. M. Lebedeva).
2. Glavnyy akusher-ginekolog Pskovskogo oblazdravotdela (for Pastukhova)
3. Zamostitel' glavnogo vracha po lechebnoy chasti Pskovskoy detskoj gorodskoy bol'nitsy (for Vorozhtsova).

(OBSTETRICS--APPARATUS AND INSTRUMENTS)

VOROZHTSOVA-ORLOVA, N.I.

Report on the work of the Mari Branch of the All-Union Society
of Soil Scientists in 1958. Pochvovedenie no.5:104-105 My
'59. (MIRA 12:8)

(Mari A.S.S.R.--Soil research)

PROCESSING AND PROPERTIES INDEX

1ST AND 2ND EDITIONS

A

The Artashian bedded phosphorites of the western slope of the Urals. P. L. Berezukov and E. M. Yurashova. *Tranz. Ser. Inst. Fertilizers Inzhimfungsizda* (U. S. S. R.) No. 142, 82-91 (in English) (1917). Phosphate rock varying in compn. from 15 to 31% P₂O₅ was found. In places these were alongside limestone beds contg. 5% P₂O₅. Owing to the depth of the deposits their economic utilization at present is doubtful. J. S. Joffe

METALLURGICAL LITERATURE CLASSIFICATION

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Ca

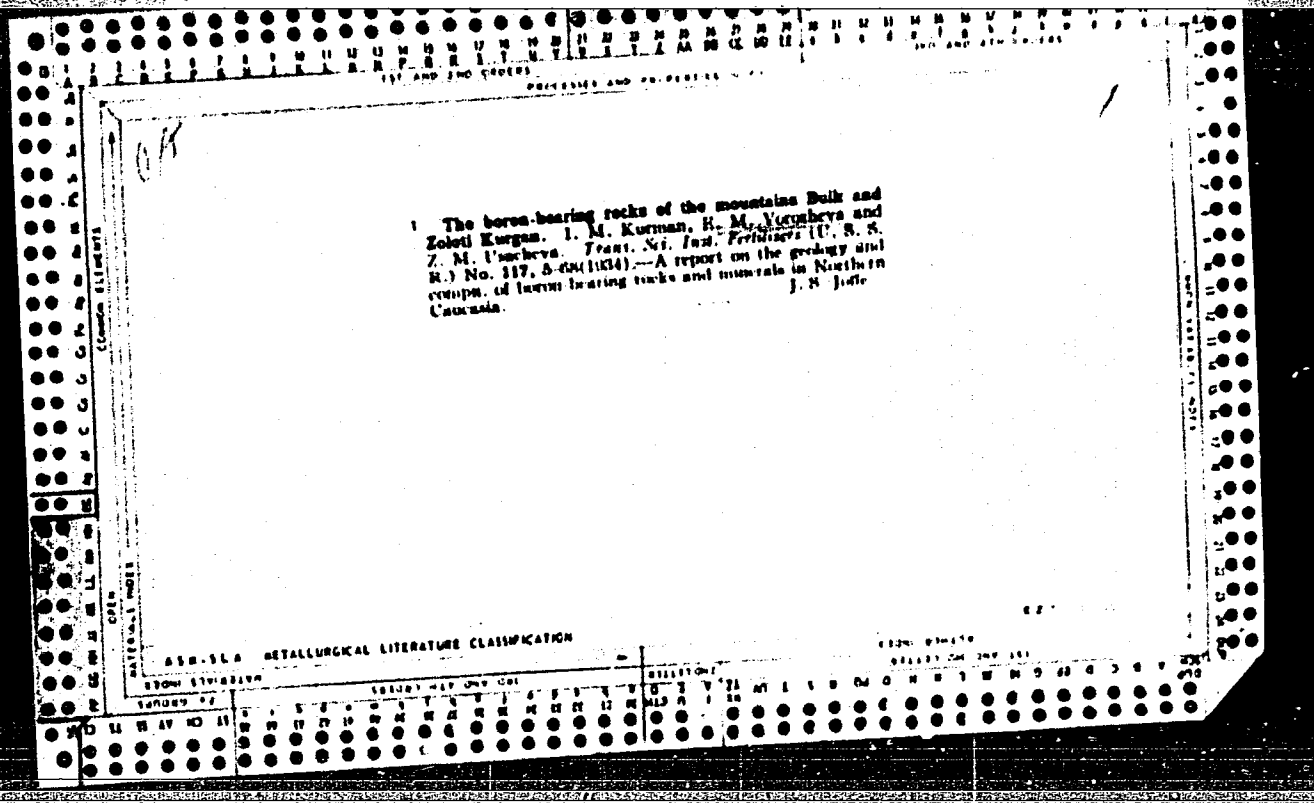
The Artinskian phosphorites of the Sterlitamak region
 E. M. Voroshneva. *Tranz. Ser. Inst. Fizichesk. Khimii* (U.S.S.R.) 1939, No. 110, 8-15. *Akrem. Khet. Ser. 1940*, No. 1, 37. V. investigated the phosphate content of formations composing the individual mountains in the Sterlitamak region, the Artinskian deposits along the Seleuk and Delaya rivers, and the drill cores of the Ishimbayev petroleum deposits. The stratigraphy of the region is given. Artinskian phosphorite formations were found in nearly all Sterlitamak mountains. Phosphorites are situated on limestones and in their crevices. Owing to weathering they are preserved only in spots and in lenses. The phosphorite horizon is represented by 2 varieties: the thinly stratified gray and

brown phosphorites (in the form of plates) contg. from 15 to 31% of P₂O₅ and the phosphate-bearing brown-gray unstratified limestones, often dolomitized. The thickness of the phosphorite formation varies between 2.5 and 3.5 m. Along the Seleuk river phosphate and dolomite are interbedded. The content of P₂O₅ is 14-22%. The black varieties contain up to 31% of P₂O₅. Results of microscopical exam. and of 3 chem. analyses of phosphorites are given. V. considers the phosphorites to be chem. pptts. of the sea of the Ural geosynclinal. There is a connection between phosphorites and dolomites in the Seleuk river region. A short description of some deposits (Tra-tau, Shak-tau, Kush-tau, Seleuk, etc.) is given.

W. R. Hena

ASB. 51.8 METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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VOROZHEVA, L.V.

Leaf roller *Tmetocera ocellana* F. as a widespread enemy of fruit
trees in eastern Siberia. Zool.zhur.34 no.1:140-146 Ja-F '55.
(MIRA 8:3)

1. Zoologicheskiy institut AN SSSR.
(Siberia, Eastern—Leaf rollers) (Fruit culture—Diseases
and pests)

114

VOROZHTSOVA, Ye. D.

Processes and Properties Index

Absorption of narcotics by the skin. E. D. Vorozhtsova. *Akusherstvo i Ginekol.* 1939, No. 1, 61-5. A hand-
 age soaked in a 50% alc. soln. of chloral hydrate (equiva-
 lent to 2 g. per kg. body wt.) placed on a shaved portion
 of rabbit skin produced a long (18-24 hrs.) sleep fre-
 quently leading to death. The state of narcosis came on
 only after 4-7 hrs. Chloroform applied to the skin in the
 same manner (one or two 10-g. doses) penetrated the
 skin in 2-4 hrs. and induced sleep of 30-60 min. in 41.05%
 of animals. Aq. solns. of evipan-Na and alc. solns. of
 barbital and phenobarbital in 1.5-2.0-g. doses were totally
 ineffective. C. S. Shapiro

E-27-0000-1144

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM SYMBOL		SYMBOL MAP ONLY USE		EXPLANATION		FROM SYMBOL																								
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

VOROZHEYKIN, A.

Subject : USSR/Aeronautics AID P - 406

Card 1/1 Pub. 135, 2/17

Author : Vorozheykin, A., MajGen of the Air Force, Twice Hero
of the Soviet Union

Title : Soviet fighters' Destructive force of fire

Periodical : Vest. vozd. flota, 9, 9-13, S 1954

Abstract : The author gives examples of the use of fire power of Soviet fighters in World War II. He analyses these examples and draws conclusions as to the education and training of fighters in peace time. Names of Soviet Air Force officers are mentioned.

Institution : None

Submitted : No date

VOROZHIBITSKIY, L.M.

Seeds.

Accelerated stratification of smoke tree seeds. Les 1 step' No. 3 1952

Monthly List of Russian Accessions, Library of Congress, July 1952.
Unclassified.

VCROZHIN, A. V.

Razvitie elektricheskoi tiagi za 30 let. [the devlopment of the electric traction during 30 years]. (Tekhnika zheleznykh dorog, 1947, no. 11, p. 15-19).

DLC: Slavic unclass.

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress, Reference Department, Washington, 1952, Unclassified.

VOROZHIN, A.V.

VOROZHIN, A.V. Razvitie elektricheskoi tiagi za 30 let. (Tekhnika zheleznnykh dorog, 1947, no. 11, p. 15-19)

DLC: Unclass.

SO: LC, Soviet Geography, Part I, 1951, Uncl.

⁸¹
VOROZHITSKII, L.

"Accelerating the Stratification of Sumach Seeds," p. 287.
(Gorsko Stópanstvo, Vol.8, No.6, June 1952, Sofiya.)

SO: Monthly List of East European Vol.2, No.9
Russian Accessions, Library of Congress, September 1953, Uncl.

⁰
VORZHITSOV, B. N.

Radioapparatura na samolete. [Aircraft radio equipment] 7. (Grazhdanskaia aviasliia, 1937
no 4 5, p 29 35, illus.) DLC: TL540. G7

SO: Soviet Transportation and Communication, A Bibliography, Library of Congress,
Reference Department, Washington, 1952, Unclassified.

B

3232 Holztechnologisches Handbuch. Band I. Allgemeines
Holzhunde, Holzschutz und Holzvergiftung. (Handbook of
Wood Technology, Vol. I. Principles, Science, Protection,
and Treatment of Wood.) Leopold Vitzthum, 518 pages, 1919
Verlag Georg Fromme & Co., Vienna 5, Austria. (TA419 V01h)
Deals with mathematics, principles of mechanics, wood struc-
tures, external appearance, chemical and physical properties,
wood pests, wood preservatives, and treatments of woods for
modification of their inherent properties. Numerous graphs,
tables, diagrams, photographs, and photomicrographs. 4-page
bibliography.

24,7700

SCCA
S/139/62/000/001/003/032
E032/E114

AUTHOR: Vorozhtsova, I.G.

TITLE: On the nature of the dielectric losses in mica

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,
Fizika, no.1, 1962, 25-31

TEXT: In a previous paper the present author suggested that the two temperature maxima in the loss angle of mica are related to the relaxational polarization of two groups of water molecules (semibound and constitutive, respectively). In the present work he has carried out experiments to verify these ideas. Muscovite was chosen as the material to be investigated since it exhibits well-defined loss-angle maxima. The temperature-frequency dependence of $\tan \delta$ and of the dielectric constant ϵ were investigated in the frequency range 20-100 000 cps at temperatures between -80 and $+250$ °C, both at atmospheric and reduced pressures (down to 10^{-4} mm Hg). In each case the specimens were roasted at 600 °C. They were in the form of discs 0.25 mm thick. It was found that at temperatures below 100 °C, the dielectric properties of the specimens are in agreement with the postulated relaxational

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On the nature of the dielectric ... S/139/62/000/001/003/032
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mechanism, namely, the frequency maximum in $\tan \delta$ is displaced towards higher frequencies with increasing temperature. Secondly, the dielectric constant in the region of the maximum of $\tan \delta$ decreases with increasing frequency; and thirdly, $\log f_{\max}$ increases linearly with T , where f_{\max} is the frequency corresponding to the maximum $\tan \delta$, and T is the absolute temperature. Above $+94^\circ \text{C}$ it was found that: 1) the direction of the displacement of the maximum in the loss angle is reversed; 2) $\log f_{\max}$ becomes inversely proportional to T ; and 3) the activation energy determined from the displacement of the maximum of $\tan \delta$ decreases with increasing temperature, reaching a negative value above $+94^\circ \text{C}$. All the above results refer to atmospheric pressure. The measurements were repeated at 10^{-4} mm Hg and it was found that at low pressures the direction of the displacement of the maximum in $\tan \delta$ was reversed at $+40^\circ \text{C}$, i.e. at a temperature lower by $50-60^\circ$ than that for atmospheric pressure. The temperature dependence of the loss angle in muscovite roasted at 600°C is rather complicated and consists of a curve with two

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On the nature of the dielectric ...

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maxima. The dielectric constant at temperatures corresponding to the low-temperature maximum of $\tan \delta$ increases with increasing temperature. At temperatures corresponding to the high temperature maximum it is found to decrease with increasing temperature. At low pressures, down to 10^{-4} mm Hg, the temperature dependence of $\tan \delta$ and ϵ remains largely unchanged, but the high temperature maximum of $\tan \delta$ shifts towards lower temperatures by 100 °C. This is said to be an unexpected effect because it was supposed that the high-temperature maximum is due to the orientation of constitutive water molecules which are more strongly bound to the crystal than the semibound water molecules. It is suggested that under the above conditions there is only one relaxation mechanism instead of the expected two. It is probable that only the semibound water molecules become oriented. On the other hand, the reversal in the direction of the shift in the maximum of $\tan \delta$ is said to be associated with structural changes occurring in muscovite while it is heated. These results are said to be consistent with the theories of I.Ts. Lyast (Ref.12: ZhTF, v.26, 1956, 2293).
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On the nature of the dielectric ... S/139/62/000/001/003/032
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Finally, comparison of the experimental results for $\tan \delta_{\max}$ with theoretical calculations showed that they are in better agreement with the formula reported by K. Cole and R. Cole (Ref. 14: J.Chem.Phys., v.9, no.4, 1941), than with the Debye formula.

There are 7 figures and 2 tables.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskii institut pri Tomskom gosuniversitete imeni V.V. Kuybysheva
(Siberian Physicotechnical Institute at Tomsk State University imeni V.V. Kuybyshev)

SUBMITTED: October 12, 1960

Card 4/4

S/139/62/000/001/008/032
E032/E114

246410
AUTHORS: Vodop'yanov, K.A., and Vorozhtsova, I.G.
TITLE: Effect of gamma irradiation on the dielectric losses in mica
PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Fizika, no.1, 1962, 48-51

TEXT: It is pointed out that muscovite and phlogopite are extensively used as electrical insulators in the nuclear power industry. However, there is little published information on the effect of gamma irradiation on the electrical properties of these materials. In the present paper the authors investigate the effect of gamma irradiation on the temperature dependence of $\tan \delta$ and of the dielectric constant of muscovite in the temperature range 20-300 °C and in the frequency range 50-10 000 cps. It was found that the dielectric properties of muscovite which had not been roasted, deteriorate after irradiation and this is related to the ionizing action of gamma radiation. The irradiation of muscovite roasted at 800 °C
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Effect of gamma irradiation on ...

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leads to a rapid reduction in the loss angle in the temperature range 20-100 °C and to a (slower) increase in the loss angle at higher temperatures. It was found that the temperature maximum of $\tan \delta$ is displaced towards lower temperatures after irradiation at 400 r/min. This is ascribed to the radiolysis of semibound water. The radiolysis may give rise to an improvement in the dielectric characteristics of mica. These properties are said to be consistent with the theories of I.Ts. Lyast (Ref.8: ZhTF, v.26, 1956, 2293). There are 5 figures.

ASSOCIATION: Sibirskiy fiziko-tehnicheskii institut pri Tomskom gosuniversitete imeni V.V. Kuybysheva (Siberian Physicotechnical Institute at Tomsk State University imeni V.V. Kuybyshev)

SUBMITTED: September 30, 1960

Card 2/2

BEDNAR, B.; PECHACEK, E.; BRAUN, A.; JIRASEK, A.; LISKA, K.; PAZDERKA, V.;
STEJSKAL, J.; STEJSKALOVA, A.; VALACH, V.; VORREITH, M.

Neoplasms of the central nervous system. Acta univ. carol. [Med] 1960:
1-102 '60.

(CENTRAL NERVOUS SYSTEM neoplasms)

VORREITH, M.; FUCHSOVA, M.; DEMCIK, K.; FUSEK, I.

Spinal cord tumors and tumors causing spinal cord compression.
Cesk. neurol. 27 no.6:372-378 N '64.

1. Patologickoanatomicke oddeleni UNV v Praze, (vedouci doc.
dr. M. Vorreith CSc.) Neurochirurgicka klinika fakulty vseobecneho
lekarstvi Karlovy University v Praze (prednosta prof. dr. Z. Kunc,
LrSc.).

YORREITH, M les, plukovník, doc. MUDr., CSc.; LEMČEK, Kamil, major,
prof. lékař

Causes of death in the army. Voj. zdrav. listy 34 no.6:
210-243 D '65.

1. Patologickoanatomicke oddeleni Ustredni vojenske nemocnice
v Praze.

L 30951-66

ACC NR: AP6023116

(A)

SOURCE CODE: CZ/0060/65/000/006/0240/0243

AUTHOR: Vorreith, Milos (Colonel; Docent; Doctor of medicine; Candidate of sciences);
Dencik, Karel (Major; Graduate physician)

ORG: Department for Pathological Anatomy, Central Military Hospital, Prague
(Patologickoanatomické oddělení Ústřední vojenské nemocnice)

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B

TITLE: Causes of death of young men in the army [This paper was presented at the
3rd Scientific Conference UVN, held in Prague on 14 May 1965.]

SOURCE: Vojenske zdravotnicke listy, no. 6, 1965, 240-243

TOPIC TAGS: army medicine, disease incidence

ABSTRACT: The authors review the causes of death of 127 men aged 18 to 27; there
were 52 tumors, 48 wounds, 12 diseases of the CNS, 10 diseases of the heart and
arteries; 5 diseases of the blood system, 6 gastric diseases, 3 kidney diseases,
3 various causes. The death was due most frequently to too long a delay before the
patients were brought to a suitable hospital, and to a lack of preventive examinations
of the soldiers. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 002

Card 1/1

UDC: 365.33:616-036.88-055.1-053.7-02

0915

1323

VORREITH, M.; VITOVSKA, M.; PAZDERKA, V.

Intestinal lipodystrophy (Whipple's disease). Cas. lek. cesk. 97 no.40:
1250-1255 3 Oct 58.

1. Patologickoanatomicke oddeleni Ustredni vojenske nemocnice nacelnik
pplk. M. Vorreith II vnitřni odd. Ustredni vojenske nemocnice, nacelnik
gen J. Srmeka Hlavni I patologicka-anatomicky ustav KU v Praze.

(LIPODYSTROPHY, case reports
intestinal (Pol))

(INTESTINES, dis.
lipodystrophy, case reports (Cz))

VORREITH, M.

Moniliasis in antibiotic therapy. Cas. lek. cesk. 92 no.17:455-462
24 Apr. 1953. (CLML 24:5)

1. Of the First Patho-Anatomical Institute (Head--Prof. H. Sıkl, M.D.)
of Charles University, Prague.

VORREITH, M.; FUCHSOVA, M.; SOUREK, K.; FUSEK, I.; FRYC, O.

Central nervous system tumors in young men. Cas. lek. cesk. 102
no.44:1202-1206 1 N '63.

1. Patologickoanatomicke oddeleni UVN v Praze, (nacelnik MUDr.
M. Vorreith, CSc.); Neurochirurgicka klinika fakulty vseobecneho
lekarstvi KU v Praze, a Ustredni vojenska nemocnice, (prednosta
prof. dr. Z. Kunc, DrSc.)

VORREITH, Milos

Primary extramedullary plasmocytoma of the rectum with metastases to the central nervous system. Cas.lek.cesk. 99 no.14:421-426 1 Ap '60.

1. Patologickoanatomické oddelení Ústřední vojenské nemocnice, náčelník podplukovník zdravotnické služby MUDr. M. Vorreith.

(MYELOMA PLASMA CELL case reports)

(RECTUM neopl.)

(BRAIN NEOPLASMS case reports)

KRAUS, Zdenek, MUDr.; PLACHY, Vladimir, major MUDr.; VORREITH, Milos, major MUDr.

Urticaria pigmentosa vesiculosa et bullosa. Cesk. dermat. 31 no.2:
78-81 Apr 56.

1. Z kozniho oddeleni KUNZ, z detske kliniky VLA, z patologicko-anatomickeho ustavu VLA Hradec Kralove.

(URTICARIA, in infant and child,
pigmentosa vesiculosa et bullosa (Cz))

VORACEK, F.

"General infection by candida albicans (Monilliasis) in antibiotic therapy." p. 455.
(CASOPIS LEKARU CESKICH, Vol. 92, no. 17, Apr. 1953, Praha.)

SO: Monthly List of East European Accessions, Vol. 2, 10, Library of Congress
October 1953, Uncl.

VORREITH, M.; FUCHSOVA, M.; FUSEK, I.; SOUREK, K.; FRIC, O.

Evaluation of biological characteristics and prognosis in
glioma. Cesk. neurol. 26 no.5:311-316 S '63.

1. Patologickoanatomicke oddeleni UVN v Praze, nacelnik MUDr.
M. Vorreith, CSc. Neurochirurgicka klinika fakulty vseobec-
neho lekarstvi KU v Praze, prednosta prof. dr. Z. Kunc, DrSc.
(GLIOMA) (NEUROSURGERY) (STATISTICS)
(PROGNOSIS)

EXCERPTA MEDICA Sec.6 Vol.8/1 Internal Medicine Jan54

86. VORREITH M. I. Path.-anat. úst. Karlovy univ. v Praha. Generalisované kandidové mykomy (*moniliasis*) při terapii antibiotiky *Generalized moniliasis in the course of treatment with antibiotics* Čas. Lék. čes. 1953, 92/17 (455-462) Illus. 4

In 3,000 routine autopsies the author found 10 cases, 8 of which are described in detail. The disease is considered to be a specific inflammation because of its typical granulomata, which differ from those of tb by a certain participation of leucocytes and by the slight histiocytic reaction. Lesions were found in the stomach, intestines, brain, kidneys and spleen. In a tabetic man of 45 yr. the only lesions were found in the pia mater of the lumbar region. For this reason, and because of communications about subcutaneous lesions in diabetics and drug addicts it is contended that *Candida albicans* was introduced through the punctures. In this series all cases had been treated with antibiotics. It is possible that the flora, thus changed diminishes the resistance against *Candida albicans* in addition to the antibiotic per se rendering conditions more favourable for the mould.

Bloch - Amsterdam (M. C.)

VORREITH, Milos; FUCHSOVA, Mirja

New data on classification of tumors of the CNS. Cesk. neur. 24 no.5:
344-350 S '61.

1. Patologicko anatomicke oddeleni Ustredni vojenske nemocnice,
nacelnik podplukovnik MUDr. Milos Vorreith.

(CENTRAL NERVOUS SYSTEM neoplasms)
(NOMENCLATURE)

VORREITH, Milos; BARES, Ludek; BENES, Vladimir; VANCURIK, Josef
APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001861020006-7"
Candidiasis of the central nervous system diagnosed by a bioptic test.
Cas.lek.cesk 100 no.31:966-971 4 Ag '61.

1. Patologickoanatomicke odd. UVN v Praze, nacelnik pplk. MUDr. M.
Vorreith, neurologicke odd. nemocnice OUNZ v Rumburku, prim. MUDr.
L. Bares, neurochirurgicka klinika KU v Praze, prednosta gen. prof.
MUDr. Z. Kunc a Vojensky ustav hygieny, epidemiologie a mikrobiologie,
nacelnik pplk. MUDr. Z. Vlasak.

(MONILIASIS diag) (BRAIN dis)

~~CZECHOSLOVAKIA~~
VORSEITH, M., MD, Candidate of Sciences, FUCHSOVA, M., FUSEK, I.,
SOURSK, S, FRYC, O., Department of Pathological Anatomy (patologicko-
anatomicke oddeleni), UVN [Ustredni vojenska nemocnice; Central Mi-
litary Hospital], Prague, M. VORSEITH, MD, commander; and Clinic of
Neurosurgery (Neurochirurgicka klinika), Faculty of General Medicine
(Fakulta vseobecneho lekarstvi), Charles University, Prague, Prof. Dr
Z. KUNC, Dr of Sciences, director [except for M. VORSEITH, affiliations
cannot be determined].

"Evaluation of the Biological Characteristics and the Prognosis of
Gliomas."

Prague, Ceskoslovenska Neurologie, Vol XXVI(LII), No 5, September 1963,
pp 311-316.

Abstract [Authors' English summary]: Tables and graphs are presented to
show the survival period in cases of glioma and medulloblastoma. Tumors
are classified according to previously published criteria. Individual
types of glioma have a characteristic degree of malignancy, and despite
difficulties it is possible to assess the prognosis with a fair degree of
reliability. It is felt that the longer average survival period in
malignant brain tumors is due in the first place to the improved
surgical technique. Four Czech references.

FUCHSOVA, Mirja; SOUREK, Karel; VORREITH, Milos

Biopic diagnosis of glioma. Cesk.neur.23 no.6:379-384 0'60.

1. Patologickoanatomicke oddeleni Ustredni vojenske nemocnice,
nacelnik pplk. MUDr. M. Vorreith. Neurochirurgicka klinika
Karlov university, prednosta gen.prof. MUDr. Z.Kunc.
(GLIOMA diagn)

VORREITH, Milos

Peri-anal oxyuric granuloma. Cas.lek.cesk.99 no.35:1108-1111
26 Ag'60.

1. Patologickoanatomicky ustav Vojenske lekarske akademie J.Ev.Purkyne,
naceinik prof.dr. A.Fingerland.
(OXYURIASIS in inf & child)
(ANUS dis)

VORREITH M. I. Path.-anat. ust. Karlovy univ. v Praze. Generalisovane kandidove mykocy (moniliasis) pri terapii antibiotiky Generalized moniliasis in the course of treatment with antibiotics Cas. Lek. ces. 1953, 92/17 (455-462) Illus. 4

In 3,000 routine autopsies the author found 10 cases, 2 of which are described in detail. The disease is considered to be a specific inflammation because of its typical granulomata, which differ from those of tb by a certain participation of leucocytes and by the slight histiocytic reaction. Lesions were found in the stomach, intestines, brain, kidneys and spleen. In a tabetic man of 45 yr. the only lesions were found in the pia mater of the lumbar region. For this reason, and because of communications about subcutaneous lesions in diabetics and drug addicts it is contended that *Candida albicans* was introduced through the punctures. In this series all cases had been treated with antibiotics. It is possible that the flora, thus changed diminishes the resistance against *Candida albicans* in addition to the antibiotic per se rendering conditions more favourable for the mould.

Bloch - Amsterdam (V, 4,6)

SO EXCERPTA MEDICA, Section VI, Vol. 8, #1, January 1954

VORTEL, V.; JINDRAK, K.; VYMOLA, F.

Pasteurellal lymphadenitis mesenterialis. Cas.lek.cesk. 98 no.44:
1377-1381 30 0 '59.

1. Patologickoanatomicky ustav VIA J. Ev. P. v Hradci Kralove,
prednosta MUDr. Ant. Fingerland. Ustredni zdrav. laboratore VIA
J. Ev. P. v Hradci Kralove, prednosta MUDr. F. Vymola.
(LYMPHADENITIS etiol.)
(PASTEURELLA infect.)

HEROUT, Vl. ; VORTEL, Vl.

Pathology of arteriography. Cas. lek. cesk. 99 no.25:761-767
17 Je '60.

1. Patologickoanatomicky ustav lekárske fakulty KU v Hradci Kralove,
prednosta prof. Dr. Sc. MUDr. A. Fingerland.
(ANGIOGRAPHY compl.)

VORTEL, Vl.; KORNON, M.

On histological demonstration of so-called ceroid, a lipotropic pigment, in the wall of the digestive system. Cas.lek.cesk.99 no.41:1308-1312 7 0'60.

1. Patologickoanatomicky ustav lekarske fakulty KU v Hradci Kralove, prednosta prof. Dr.Sc. MUDr. A.Fingerland.

(PIGMENTS chem)

(GASTROINTESTINAL SYSTEM chem)

VORTEL, V.

Proteus encephalitis in newborn infants. Cas. lek. cesk. 99 no.25:
788-792 17 Je '60.

1. Patologickoanatomicky ustav lebarske fakulty KU v Hradci Kralove,
prednosta prof. MUDr. A. Fingerland.
(ENCEPHALITIS in inf. & child)
(PROTEUS INFECTIONS in inf. & child)
(INFANT NEWBORN dis.)

FINGERLAND, Antonin, prof., doktor med.; VORTAL', Vladimir, dotsent, doktor med.

Some staphylococcal infections caused by strains of microbes resistant to antibiotics which arise in surgical wards. Vest. khir. 83 no.7:21-30 J1 '59. (MIRA 12:11)

1. Iz kafedry patologicheskoy anatomii Voyenno-meditsinskoy akademii v Grudtse Kralove (Chekhoslovatskaya Respublika). (STAPHYLOCOCCAL INFECTIONS)

GRASHCHENKOV, N.I., professor; KASSIL', G.N. (Moskva): (Po materialam S.P. Vinitakovsky, G.S. Vorsa, S.M. Grach, N.G. Grachenoy, M.B. Dunayevskoy F.A. Rosincy, V.V. Stankevich. A.L. Sheakhmana, A.A. Shmidt)

Data on nasal reflex therapy in medical practice. Klin. med. 33 no. 9:12-17 S '55. (MIRA 9:2)

1. Iz terapevticheskogo, nervnogo i fizioterapevticheskogo otdeleniy Moskovskoy ordena Lenina bol'nitsy imeni S.P. Botkina i nauchno-issledovatel'skoy gruppy pri otdelenii biologicheskikh nauk Akademii nauk SSSR. 2. Deyatvitel'nyy chlen AMN SSSR (for Grashchenkov)

(THERAPEUTICS,

mass reflex ionogalvanic ther. technic)

(ELECTROTHERAPY,

mass reflex ionogalvanic ther. technic)

VORSATZ, BRUNO

HUNGARY/Optics - Methods of Analysis

K-8

Abs Jour : Ref Zhur - Fizika, No 5, 1958, No 12018

Author : Vorsatz Bruno

Inst : Not Given

Title : Pulse Device, Used for Excitation in Spectral Analysis

Orig Pub : Magyar, tud, Akad. Kozr, fiz kutato intez kozl., 1954, 2,
No 1, 125-132

Abstract : No abstract

Card : 1/1

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001861020006-7

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001861020006-7"

~~ARON, BORSAI, Bruno~~
~~ARON, BORSAI~~

HUNGARY/Optics - Instruments for Optical Analysis

K-9

Abs Jour : Ref Zhur - Fizika, No 4, 1958, No 9608

Author : ~~Yorsatz~~ Bruno

Inst : Not Given

Title : Comparison Fitting for Spectroscope

Orig Pub : Meres es automat., 1955, 3, No 12, 370-374

Abstract : Detailed description of a simple fitting, which produces a comparison spectrum in the spectroscope field of view.

Card : 1/1

USCOMM-DC-55, 210

VOICSAFC 1B

VORSATZ, BRUNO

HUNGARY/Analysis of Inorganic Substances

G-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19641

Author : Bruno Vorsatz

Inst : Hungarian Academy

Title : Determination of Admixtures in Copper of High Purity by Spectral Method.

Orig Pub: Magyar Tud. Akad. Musz. Tud. Oszt. Kozl., 1955, 16, No 2-4, 279 - 286.

Abstract: The method of the determination of admixture traces in copper with exciting spectrum in a globular arc is described. A weighed sample of copper is placed on a carbon or copper electrode. The sample is switched in as cathode, the current is of 5 a. The arc discharge from

Card 1/3

- 123 -

HUNGARY/Analysis of Inorganic Substances

G-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19641

electrode. The copper melts in the arc discharge and produce an alloy with these substances. Parallel spectral and microscopical study of copper allows to judge the metal purity with great confidence.

Card 3/3

- 125 -

VORSATZ, B.

Distri: 4E2c/4E3d

109. Quantitative spectrum analysis of precious metals.
B. Vorsatz. *A Magyar Tudományos Akadémia
Közlemények Kötetétől Intézetének Közleményei* (Pro-
ceedings of the Central Research Institute for Physics
of the Hungarian Academy of Sciences). Vol. 5, 1957,
No. 2, pp. 123-129, 4 figs.

Spectrum analysis is very suitable for the exami-
nation of the purity of precious metals in the elementary
state and for the quantitative determination of the
contaminating and accompanying elements, especially
of those below 0.1%. A simple and quick spectrochemical
method, which can be carried out without special appa-
ratus, is proposed for the determination of the contami-
nants and accompanying elements in metallic silver,
gold and platinum. The main characteristics of the
method are the following: the spectra of the samples
to be tested are taken with d.c. arc excitation, with
complete combustion in carbon electrodes. The tests
for comparison are made by applying a solution of the
elements to be tested on a small piece of filter paper
which is dried and introduced by alloying in the arc
into a spectrochemically pure globule or into one having
a known composition.

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VORSATZ, Bruno

Application of time decomposition in alternating-current oscillation.
II. Magyar kem folyoir 66 no.12:482-483 D '60.

1. Kozponti Fizikai Kutato Intezet, Budapest.

BELAN, Janos; VORSATZ, Bruno

Quick analysis of two-ingredient brasses with automatic spectrometer. Koh lap 95 no.3: Supplement; Ontode 13 no.3: 67-69 Mr '62.

1. Csepeli Femmu (for Belan) 2. Kozponti Fizikai Kutato Intezet (for Vorsatz).

VORSHKOV, A. A. (ENG.)

Wrote about ENERGODETAIL' ("Energo-Detail") Plant; manufacture of automatic control equipment cenziued by TSRTI.

Soviet Source: P: Elektricheskiye Stantii, No. 7 July 48, Moscow
Abstracted in USAF, "Treasure Island", on file in Library of Congress, Air Information
Division, Report No. 91664.

VORSIN, A. N.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 43 - 29/97

Authors : Vorsin, A. N.

Title : Adaptation of an impulse discharge for the excitation of less excitable elements

Periodical : Izv. AN SSSR. Ser. fiz. 18/2, 262-263, Mar-Apr 1954

Abstract : Two types of impulse discharge generators are briefly described. The discharge impulse of one of the generators was of sinusoidal form. Assuming that a rectangular impulse would be more advantageous, the author investigated the discharge of an artificial spectral line consisting of three Γ -shaped cells, the volume of each cell was $0.4 \mu f$. A study of halide spectra showed that the spectral lines in this case are much narrower and the lines of easily-excitable elements (Cu) less intensive.

Institution : Academy of Sciences USSR, West-Siberian Branch

Submitted :

VORSIN, A. N.

Vorsin, A. N. - Radio-Frequency Mass-Spectrometer for Determining the Absolute Age of Rocks by the Potassium Argon Method.

The Sixth Session of the Committee for Determining the Absolute Age of Geologic Formations at the Department of Geologic-Geographic Sciences (OGON) of the USSR Academy of Sciences at Sverdlovsk in May 1957

Изв. АН УССР, Сер. Геол.-геогр. Наук, 1958, № 1, с. 117-119. (См. также: Ворсин, А. Н., 1958, стр. 117-119.)

VORISIN, A. N.

34(7)

PHASE I BOOK EXPLOITATION

307/1700

1. Univ. Universitet

Materialy X Vsesoyuznogo sovetskoye po spektroskopii, 1956
 G. Lit Atomnaya spektroskopiya (Materialy of the 10th All-Union
 Conference on Spectroscopy, 1956, No. 2), Akad. Spectroscopy
 (Ser. 2), Izd-vo Akad. Nauk SSSR, 1958, 568 p. (Serial list:
 Fizicheskii sbornik, vyp. 4(9)), 3,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR, Komissiya po
 spektroskopii.
 Editorial Board: G.S. Landsberg, Academician, (Resp. Ed.);
 M.S. Rapoport, Doctor of Physical and Mathematical Sciences;
 I.L. Fabelinskiy, Doctor of Physical and Mathematical Sciences;
 V.A. Fabrikant, Doctor of Physical and Mathematical Sciences;
 V.G. Koritskiy, Candidate of Technical Sciences; S.M. Raytskiy,
 Candidate of Physical and Technical Sciences; L.A. Il'movskaya,
 Candidate of Physical and Mathematical Sciences; V.S. Milyanukh
 (Deceased), Doctor of Physical and Mathematical Sciences; A.Ye.
 Glumberman, Doctor of Physical and Mathematical Sciences;
 M.I. S.L. Giler, Tech. Ed.; T.V. Sarayuk.

PURPOSE: This book is intended for scientists and researchers in
 the field of spectroscopy, as well as for technical personnel
 using spectrum analysis in various industries.

CONTENTS: This volume contains 177 scientific and technical studies
 and is published at the 10th All-Union Confer-
 ence on Spectroscopy in 1956. The studies were carried out by
 members of scientific and technical institutes and include
 extensive bibliographies of Soviet and other sources. The
 studies cover many phases of spectroscopy: spectra of rare earths,
 ultraviolet radiation, physicochemical methods for controlling
 uranium production, physical and technology of gas discharge,
 optics and spectroscopy, abnormal dispersion in metal vapors,
 and minerals, photographic methods for quantitative spectrum
 analysis of metals and alloys, spectral determination of the
 hydrogen content of metals by means of isotopes, tables, and
 atlases of spectral lines, spark spectrographic analysis,
 statistical study of variation in the parameters of dilution
 curves, determination of traces of metals, spectrum analysis in
 metallurgy, thermochemistry in metallurgy, and principles and
 practice of spectrochemical analysis.

Card 2/31

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Shelkov, I.S., and A. Kostin. Studying the Photometric Characteristics of Photon Counters	193
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Card 13/31

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PHASE I BOOK EXPLOITATION

SOV/3396

Vorsin, Aleksandr Nikolayevich, Yevgeniy Fedorovich Doil'nitsyn,
Anatolii Yustinovich Trubetskoy, and Mira Yakovlevna Shcherbakova

Radiobchastotnyy mass-spektrometr; teoriya, raschet i konstruirovaniye
(Radio-Frequency Mass Spectrometer; Theory, Design, and Construc-
tion) Moscow, Izd-vo AN SSSR, 1959. 74 p. Errata slip inserted.
3,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Sibirskoye otdeleniye.
Institut geologii i geofiziki.

Resp. Ed.: V. M. Klyarovskiy; Ed. of Publishing House: A.P. Senchen-
kov; Tech. Ed.: Yu. V. Rylyina.

PURPOSE: This monograph is intended for specialists in spectrometry.

COVERAGE: The authors present the results of work done by them
at the Laboratory of Absolute Geological Age of the Institute
of Geology of the West Siberian Branch of the Academy of Sciences,
USSR. They describe a Bennet-type radio-frequency mass-spectro-
meter and outline the theory and calculation in the utilization

Card 1/4

Radio-Frequency Mass Spectrometer (Cont.)

SOV/3396

of various forms of a high-frequency signal. The spectrometer was built at the Laboratory, and the technology of its construction is briefly described, as well as results of testing and tuning the instrument and the selection of operating conditions. The authors are of the opinion that the possibility of building under laboratory conditions, portable mass-spectrometers with known parameters will be of interest to all specialists in this field. The Introduction and Chapter II were written by Y. F. Doil'nitsyn, Chapter I was written by M. Ya. Shcherbakova, and Chapter III by A. Yu. Trubetsky. The whole work was written under the general supervision of A. N. Vorsin. There are 60 references, 11 of which are Soviet (including 2 translations) and the remainder are Canadian, English, French, German and Swiss.

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Radio-Frequency Mass Spectrometer (Cont.)

SOV/3396

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Radio-Frequency Mass Spectrometer (Cont.)

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AVAILABLE: Library of Congress

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JP/mg
4-25-60

VORSIN, A. N.

Vorsin, A. N. - Information on the Work of the West Siberian Branch of the USSR Academy of Sciences.

The Sixth Session of the Committee for Determining the Absolute Age of Geologic Formations at the Department of Geologic-Geographical Sciences (OGGH) of the USSR Academy of Sciences at Sverdlovsk in May 1957

Izv. Ak Nauk SSSR, Ser. Geol., No. 1, 1958, p. 119-118 author: Iskarskaya, T. B.

VORSIN, A.N.

Flame spectrophotometer. Fiz.sbor. no.4:197-198 '58.
(MIRA 12:5)

1. Gorno-geologicheskii institut Zapadno-Sibirskogo filiala
AN SSSR.

(Spectrophotometer)

VORSIN, A.N.; GUSEV, G.M.

Low-temperature flame photometry. [Trudy] Inst. geol. i geofiz. Sib.
otd. AN SSSR no.32:3-15 '65. (MIRA 18:9)

VORSIN, A.N.

Quantitative determination of some not easily excitable elements
by means of a square-topped pulse oscillator. Izv.AN SSSR.Ser.
fiz.19 no.2:150 Mr-Apr '55. (MLRA 9:1)

1.Zapadno-Sibirskiy filial Akademii nauk SSSR.
(Tartu--Spectrum analysis--Congresses)

VORSIN, A. N.

"Use of Pulse Discharge for Exciting Difficulty Excitable Elements"
Trudy Sibirskogo Fiz, Tekh. Inst. Pri Tomskom Univ., No 32, 1955,
pp 63-66

Design and operation of a pulse circuit with an approximately square pulse for spectral analysis is described. The advantage of this device over a condensed spark circuit is emphasized. The device may be applied to such difficulty excitable elements as haloids and sulfur. (RZhFiz, No 2, 1955)

SO: Sum. 492, 12 May 55

VORSIN, A.H.

Use of pulse discharges for the excitation of elements
difficult to excite. Izv. AN SSSR Ser.fiz.18 no.2:262-
263 Mr-Ap '54.

(MLRA 7:11)

1. Zapadno-sibirskiy filial Akademii nauk SSSR.
(Spectrum analysis)

VORSIN, Aleksandr Nikolayevich; DOIL'NITSYN, Yevgeniy Fedorovich;
TRUBETSKOY, Anatoliy Iustinovich; SHCHERBAKOVA, Mira Yakovlevna;
KLYAROVSKIY, V.M., otv.red.; SENCHENKOV, A.P., red.izd-va;
RYLINA, Yu.V., tekhn.red.

[Radiofrequency mass spectrometer; theory, design and construction]
Radiochastotnyi mass-spektrometr; teoriia, raschet i konstruirovaniie.
Moskva, Izd-vo Akad.nauk SSSR, 1959. 71 p. (MIRA 12:12)
(Mass spectrometry) (Radiofrequency spectroscopy)

4

The capacity of a Hg cathode in the presence of multi-valent cations. M. Vorina and A. Frumkin. *Acta Physicochim. U. R. S. S. R.* 10, 242-63(1943)(in English); *J. Phys. Chem. (U. S. S. R.)* 17, 295-310(1943)(in Russian).--The capacities of the surface of a Hg electrode in dil. solns. of BaCl₂, LaCl₃ and ThCl₄ have been measured. Throughout the cases examd. capacity maxima were observed at potentials corresponding to not very high neg. values of the surface charge. The magnitude of the surface charge, that of the potential at the distance of one ionic radius from the interface and the equl. capacity of the electrode were calcd. from equl. data. These calcons. show that the presence of multivalent cations brings about a reversal of the neg. charge of the electrode surface. Possible interpretations of this effect are discussed from the viewpoint of the double-layer theory.

E. H. Rathmann

ANNUAL METALLURGICAL LITERATURE CLASSIFICATION

Bo. 11.

de l'electrode de mercure

Capacity of a mercury electrode in presence of multivalent cations.
M. Vorsina and A. Frumkin (*Acta Physicochim. U.R.S.S.*, 1943, 18, 242-263).—The influence of Ba^{++} , La^{+++} , and Th^{++++} on the capacity (C) of the Hg electrode at various potentials and concns. has been examined, 0.01N- and 0.001N-HCl being used as initial solutions. On addition of these cations C_{max} increases and, in the case of La^{+++} and Th^{++++} , is shifted towards less negative potentials. On the cathodic branch of the C -potential curve small additions of cations cause an abrupt rise in C leading to a max. after which C falls to a val. $>$ that in the original HCl. C_{max} in presence of La^{+++} is approx. the same for both HCl concns., suggesting that it is La^{+++} and not $\text{La}(\text{OH})_3$, which is adsorbed. Calculations of the magnitude of the surface charge, the potential at the distance of one ionic radius from the interface, and the equiv. C of the electrode show that these cations bring about a reversal of the negative charge of the electrode surface. The data are discussed with reference to the Stern double layer theory.
C. R. H.

1ST AND 2ND PAGES PROCESSING AND PROPERTY MARKS 1ST AND 2ND PAGES

2

Effect of the anion on the capacity of a mercury electrode in dilute solutions. M. Voshni and A. Frumkin. *Acta Physicochim. U.S.S.R.* 16, 841-80(1942) (in English). — The magnitude of the min. value of the differential capacity and of the corresponding value of the potential in dil. soln. depend on the adsorbability of the anion. The increase of the latter is followed by an increase of the min. capacity, and the position of the min. is shifted toward more neg. potentials. In presence of strongly adsorbed anions (S^{2-}) at not too low concns., the min. on the capacity curve disappears altogether. The values of min. capacity observed in electrolyte solns., which do not lower the interfacial tension at the Hg-soln. boundary and in which the specific adsorption of anions is, consequently, least marked ($NaCl$, Na_2CO_3), still considerably exceed the values obtained from the double-layer theory. A qual. interpretation of the effect of specific adsorption of anions on the magnitude and position of the capacity min. may be given on the basis of the Stern double-layer theory.

F. H. Rathmann

A18-55A METALLURGICAL LITERATURE CLASSIFICATION

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in lib

Influence of the anion on the capacity of a mercury electrode in dilute solutions. M. Vorina and A. Frumkin (*Acta Physicochim., U.R.S.S.*, 1943, 18, 341-350).—As an extension of an earlier investigation (cf. A., 1944, 1, 345) the capacity (C) of a Hg electrode in solutions of H_2SO_4 , NaOH, Na_2SO_4 , HCl, KCl, HBr, and KBr has been measured. The val. of C_{max} is > the val. calc. according to the Stern double layer theory when sp. adsorption is neglected. The magnitude of C_{max} and the corresponding val. of the potential depend on the adsorbability of the anion, increase in the latter being accompanied by an increase in C_{max} . Where anion adsorption is strong, as, e.g., with appreciable concns. of I^- , C_{max} disappears altogether. C. R. H.

VORSINA, M.; FRUMKIN, A.

Lab. of Surface Phenomena, Physico-Chemical Inst. imeni L. Ya. Karpov, Moscow (-1943-)

"The Capacity of the Mercury Electrode in the Presence of Polyvalent Cations." Zhur.
Fiz. Khim., Vol. 17, No. 5-6, 1943

BR-52059019

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N. A. TRIFONOV, Bull. Inst. rec. biol. Perm, 1931, 7, 343-406

CHERNOV, M.S.; dots.; MIKEROVA, V.V., dots.; VORSINA, M.A., dots.;
KUVSHINNIKOV, I.M., dots.; MIL'CHEV, V.A., dots.; MATYER,
M.M., prepod.; IVANOVA, V.M., assist.; TITOV, V.F., prepod.;
GRISHINA, L.V., assist.; BELYAYEVA, Ye.M., assist.; POPOVA,
L.F., assist.; GUSEV, S.P., prof., md.; SERGEYEVA, A.S.,
tekh. red.

[Laboratory manual on general chemistry; for the students
of the institutions of higher learning specializing in the
study of commodities and technology] Rukovodstvo k praktiche-
skim zaniatiyam po obshchei khimii dlia studentov tovarove-
denykh i tekhnologicheskikh spetsial'nostei vysshikh ucheb-
nykh zavedenii. Pod obshchei red. S.P.Guseva. Moskva, 1962.
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206 p.

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7

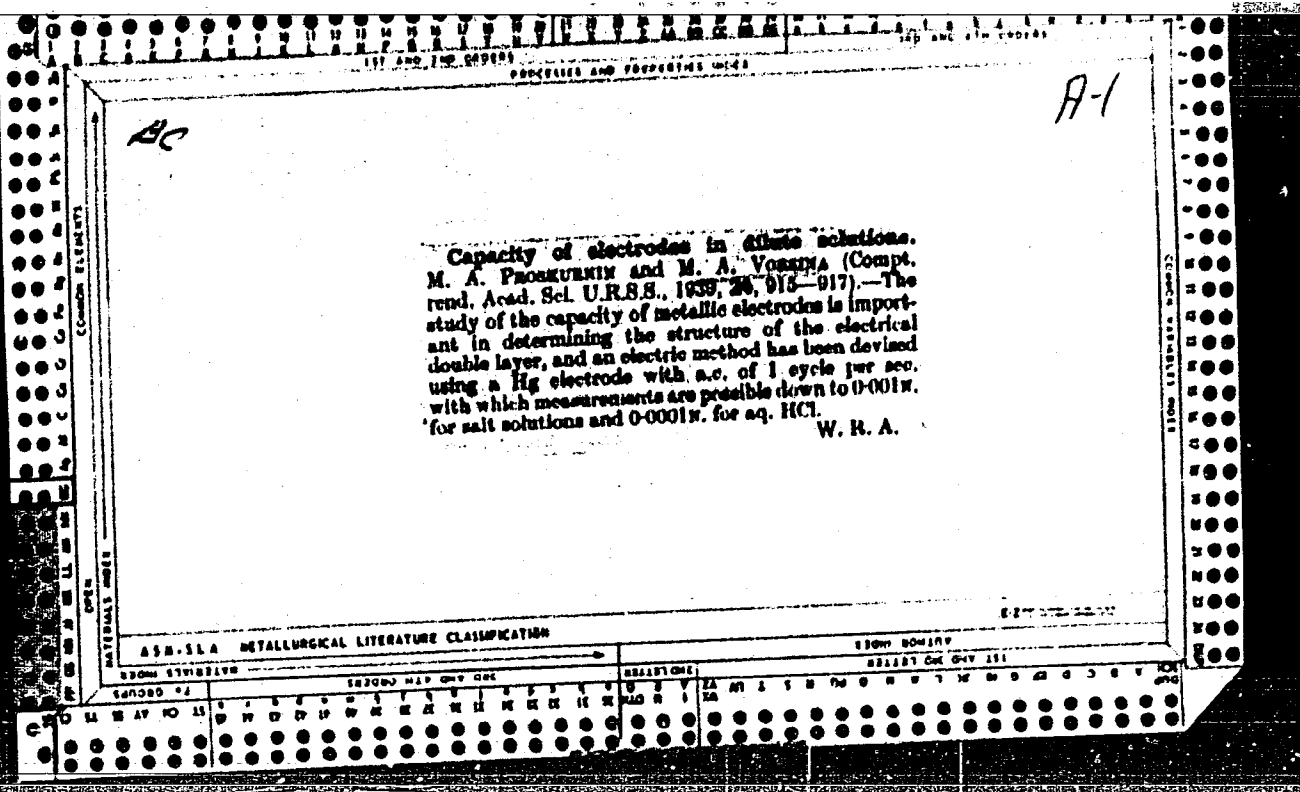
CP

PROCESSES AND PROCEDURES

The use of bi-metallic electrodes in the titration of acids and alkalies. Yu. A. Boltunov and M. A. Voronin. *Gen. Chem. (U. S. S. R.)* 5, 619-22 (1935). The electrodes were cut out of sheet metal, with the exception of Sb (cf. C. A. 23, 4614) and satd. calomel. The following pairs gave reproducible e. m. f. which changed rapidly at the neutrality point: Pt-Sb, Pt-Ni, Pd-Ni, Pt-Co, Sb-C, Ni-calomel. However, the cells contg. Sb could not be used in the titration of alkalies or of oxalic, citric and other acids, because they dissolve Sb_2O_3 . The e. m. f. minima of the Sb-C pair did not correspond to the neutralization point, the error being due to the adsorption of acids by the C electrode. The following pairs could be used once only and only in the titration of acids with alkalies: Pt-W, Pt-Mo, Pt-Ta, W-Ni. Repeated use is possible if the W, Mo and Ta electrodes are reconditioned by treatment with HNO_3 or electrolysis in alk. soln. with the metal as the anode. The following pairs proved unsuitable as neutrality indicators: Pt-Fe, Pt-Cu, Pt-C, Pt-Cr, Pt-Al, Pt-Pb, Pt-Sn. Among the electrode poisons, CN and SO_2 ions rendered the Ni electrode useless when present in concns. greater than $0.00001 M$. H_2S reacted with the Ni electrode, but did not change its potential. Pd and Pt electrodes were poisoned by H_2S concn. in excess of $0.001 M$. Those metals whose hydrated oxides ppt. at about pH 7 act as good indicator electrodes. The slope of the titration curve at the point where the pptn. occurs can be calcd. beforehand if the H-ion concn. is known. Thus, differentiating the e. m. f. equation for metal-metallic oxide electrodes, we obtain: $(dE/d[H]) = (RT/F[H])$.

B. Boyenkoff

ASB-314 METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

171

Capacity of double layer of mercury electrode in dilute solutions of hydrochloric acid and of potassium chloride. M. A. YONINA and A. N. FRUMKIN (Compt. rend. Acad. Sci. U.R.S.S., 1939, 26, 918-921).—The method described (see preceding abstract) has been used to plot the capacity curves of a Hg electrode in dil. KCl (1, 10⁻², 10⁻³, 10⁻⁴ M) and HCl (10⁻², 10⁻³ M). The curve of 0.1N-KCl consists of two almost horizontal branches which correspond with a double layer formed of anions and cations respectively, and a connecting branch with intermediate capacity val. At high positive or negative surface charges the capacity val. increases owing to the deformation of ions. This curve does not indicate a diffuse structure. The data are compared with the requirements of Stern's theory.

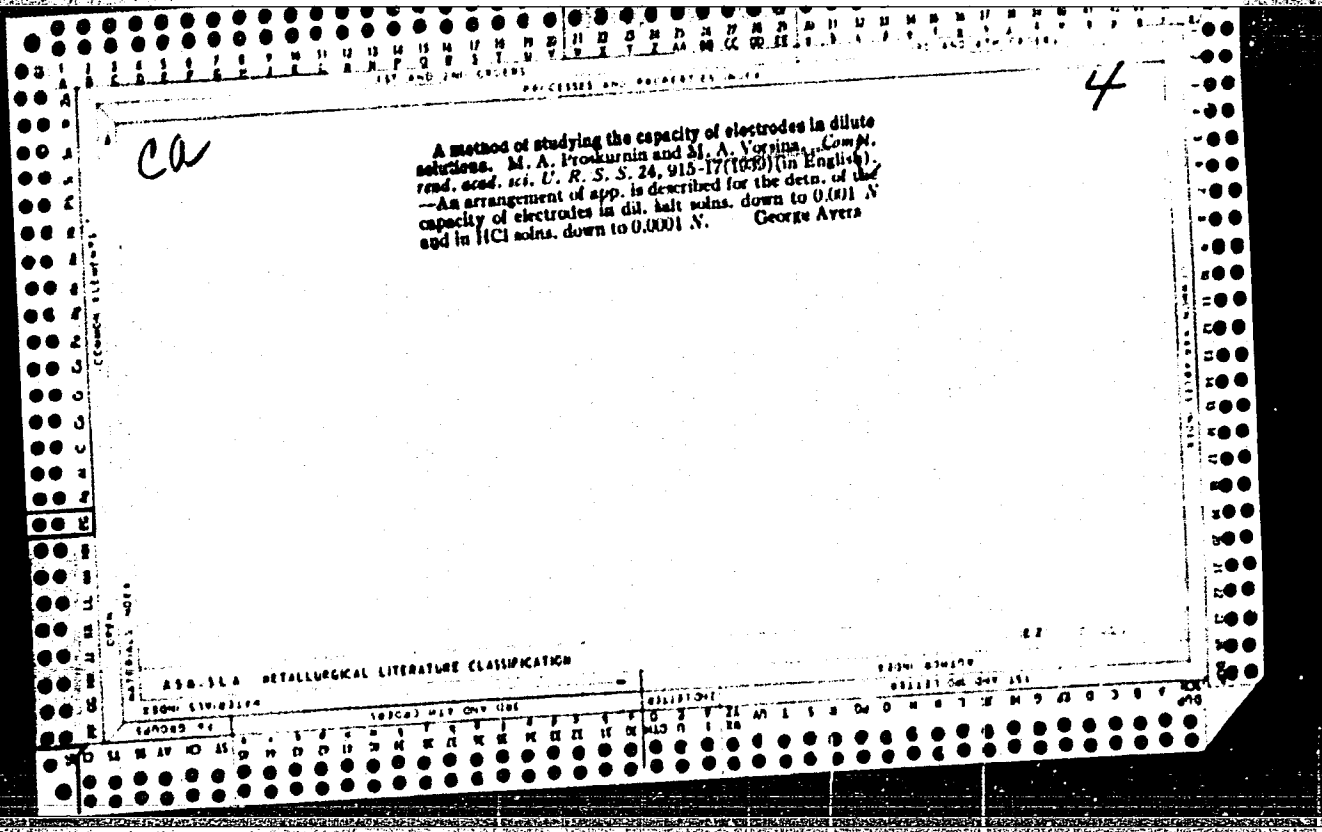
W. R. A.

METALLURGICAL LITERATURE CLASSIFICATION

SECTION 171

COLLECTOR

BRITISH CHEMICAL SOCIETY



1ST AND 2ND SERIES PROCESSED AND PROPERTIES MORE

a-1

bc

Application of bimetallic electrodes to titration of acids or alkalis. J. A. BOLTONOV and M. A. VORONINA (J. Gen. Chem. Russ., 1936, 8, 519-523).—The bimetallic electrodes Pt-Ni, -Sb, -Co, -Pd, Pd-Ni, and Ni-Hg₂Cl₂ may be used repeatedly without inactivation for the titration of weak or strong acids (< 0.001N), and of alkalis. Pt-W, -Mo, -Ta, W-Ni, and O-Sb are less suitable, as they have to be reactivated after each determination, whilst Pt-Fe, -Cu, -O, -Al, -Pb, and -Sn electrodes do not give trustworthy results under any conditions. R. T.

A5B-55A METALLURGICAL LITERATURE CLASSIFICATION

6-2

SERIES ONE ONLY 101

GROUP #1	GROUP #2	GROUP #3	GROUP #4	GROUP #5	GROUP #6	GROUP #7	GROUP #8	GROUP #9	GROUP #10	GROUP #11	GROUP #12	GROUP #13	GROUP #14	GROUP #15	GROUP #16	GROUP #17	GROUP #18	GROUP #19	GROUP #20	GROUP #21	GROUP #22	GROUP #23	GROUP #24	GROUP #25	GROUP #26	GROUP #27	GROUP #28	GROUP #29	GROUP #30	GROUP #31	GROUP #32	GROUP #33	GROUP #34	GROUP #35	GROUP #36	GROUP #37	GROUP #38	GROUP #39	GROUP #40	GROUP #41	GROUP #42	GROUP #43	GROUP #44	GROUP #45	GROUP #46	GROUP #47	GROUP #48	GROUP #49	GROUP #50	GROUP #51	GROUP #52	GROUP #53	GROUP #54	GROUP #55	GROUP #56	GROUP #57	GROUP #58	GROUP #59	GROUP #60	GROUP #61	GROUP #62	GROUP #63	GROUP #64	GROUP #65	GROUP #66	GROUP #67	GROUP #68	GROUP #69	GROUP #70	GROUP #71	GROUP #72	GROUP #73	GROUP #74	GROUP #75	GROUP #76	GROUP #77	GROUP #78	GROUP #79	GROUP #80	GROUP #81	GROUP #82	GROUP #83	GROUP #84	GROUP #85	GROUP #86	GROUP #87	GROUP #88	GROUP #89	GROUP #90	GROUP #91	GROUP #92	GROUP #93	GROUP #94	GROUP #95	GROUP #96	GROUP #97	GROUP #98	GROUP #99	GROUP #100
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V.N.

Acetylene derivatives. Part 189: Synthesis and conversion of
3-vinylethynyltetrahydro-3-furanols. Zhur. ob. khim. 27 no.11:
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1. Institut organicheskoy khimii imeni N.D. Zelinskogo Akademii
nauk SSSR i Khimicheskii institut Akademii nauk Armyanskoy SSR,
(Furanol)

VORTANYAN, S.A.

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Acetylene derivatives. 169. Hydration of vinylacetylene hydrocarbons
in alcohol and phenol solutions. Zhur.ob.khim.25 no.6:1111-1117 Je
'55. (MLRA 8:12)

1. Khimicheskiy institut Akademii nauk Armyanskoy SSR.
(Acetylene compounds)