VIKTOROV, S.V.; GOVORUKHIN, V.S.; SPIRIDONOV, A.I.

Talented Soviet geographer and karst investigator; on the 50th birthday of N.A.Gvozdetskii, 1913- . Trudy MOIP 12:191-193 '64.
(MIRA 18:1)

VIKTOROV, S.V.; VOSTOKOVA, Ye.A.; VYSHIVKIN, D.D.

Some problems of the theory of geobotanical indicator studies.
Trudy MOIP 8:7-11 '64.

(MIRA 17:12)

VIKTOROV, S.V.

Vegetation as an indicator of gypsum accumulation in the sands of the Karyn-Yaryk Depression. Izv. AN SSSR Ser. geog. no.4: 111-114 '64 (MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii.

VIKTOROV, S.V.

"Biogeography with the fundamentals of biology" by A.G.Voronov. Reviewed by S.V.Viktorov. Biul.MOIP.Otd.biol. 69 no.2:144-145 Mr-Ap '64. (MIRA 17:4)

CHIKISHEV, A.G.; VIKTOROV, S.V.

Indicative geobotany. Priroda 52 no.12:45-52 '63.
(MIRA 17:3)

1. Institut geografii AN SSSR (for Chikishev). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii, Moskva (for Viktorov).

VIKTOROV, S.V., nauchn. red.; ZHARKOVA, A.P., tekhn. red.

[Geobotanical methods in the study of hydrogeology and engineering geology; transactions] Geobotanicheskie metody pri gidrogeologicheskikh i inzhenerno-geologicheskikh issledovaniiakh; trudy. Moskva, 1962. 78 p.
(MIRA 17:3)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii.

VIKTOROV, S.V.

Indicative trend in modern geography. Biul. MOIP Otd. geol. 37 no.6:139 N-D '62. (MIRA 16:8)

VIKTOROV, V.; DAVYDOV, M.

Prevent accidents from static electricity. Bezop. truda v prom. 8 no.9:24-25 S '64 (MIRA 18:1)

VIKTOROV, V.

Nikolai Kozlovskii. Sov.foto 22 no.10:20-25 O '62. (MIRA 15:11)

(Photographers, Ukrainian)

VIKTOROV, V.

In the wide open fields. Okhr. truda i sots. strakh. 5 no.6:24-25 Je '62. (MIRA 15:7)

(Farm mechanization)

VIKTOROV, V.

Over-all technical and economic highway research in transportation centers. Avt.dor. 25 no.1:26-27 Ja '62. (MIRA 15:2)
(Highway research)

VIKTOROV, V.

Marketing of whole milk. Sov. torg.no.2:37-39 F '58. (MIRA 11:1)
(Milk trade)

VIKTOROV, V.

Nature of the Soviet pilot. Kryl.rod. 2 no.2:13-14 F '51.
(MLRA 10:2)

(Sivkov, Grigorii Flegontovich)

VIKTOROV, V.

35342. Zhizn' Dopisyvaet Knigu. (O Kolkhoze "Oktoobri vyyt". Estons. SSR. Ocherk.) Ogonek, 1949, No. 47, S. 6-7

SO: Letopis' Zhurnal'nykh Statey Vol. 34, Moskva, 1949

STORCHIYENKO, P.; VIKTOROV, V.; IVANOV, S., redaktor; ZHURAVLEV, A., tekhnicheskiy redaktor

[From high altitudes] S bol'shikh vysot; zapiski parashiutista. Literaturnaia sapis', V.Viktorova. Moskva, Izd-vo DOSAAF, 1954. 127 p. [Microfilm] (MLRA 8:2)
(Parachutists)

VIKTOROV, V., polkovnik

Good on the drill field, strong in combat. Voen.znan. 36 no.6: 13-14 Je '60. (MIRA 13:6)
(Infantry drill and tactics)

VIKTOROV, V. (Moskva)

Sergei Pudov and his brigade. Mest.prom.i khud.promys. 2 no.10:8 O '61. (MIRA 14:11)
(Labor productivity)

VIKTOROV, V.

Passionate fighter. Mast.ugl. 9 no.11:29 N '60. (MIRA 13:12)
(Yaroslavskii (M.I.Gubel'man), Emel'ian Mikhailovich, 1878-1943)

VIKTOROV, V.

Economic justification for the construction of automobile roads. Tr. from the Russian. p.19.
(Silnice, Vol. 6, No. 3, Mar. 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

VIKTOROV, V., inzh.

Efficient organization of rapid construction of large-block buildings. Na stroi.Mosk. 1 no.9:6-9 S '58. (MIRA 11:12)
(Concrete slabs) (Moscow--Boarding schools)

VIKTOROV, V

N/5
235.5
.V6

Zolotyye medal'; ocherki o sports-menakh sovetskoy armii
(Gold medals;essays on sportsmne of the Soviet Army)
Moskva, Voyennoye Izd-vo Ministerstva Oborony Soyuza SSR, 1955
183 p.

L 6574-66 EWT(1)/EWA(h)/ETC(m) WW

ACC NR: AP5025050 SOURCE CODE: UR/0286/65/000/016/0091/0091

AUTHORS: Viktorov, V. A.; Petrov, B. N.; Abramov, A. S.; Maslov, G. S.; Khokhlov, V. P.; Samsonov, G. A.

ORG: none

37
B

TITLE: Resonance level gauge. Class 42, No. 173971

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 91

TOPIC TAGS: liquid level indicator, resonator, HF oscillator, electronic circuit

ABSTRACT: This Author Certificate presents a resonance level gauge containing a high frequency oscillator for exciting a resonance detector with a step frequency characteristic and a frequency modulator for periodic variation of the oscillator frequency in the range of the level variation. To increase the accuracy of discrete measurement of the liquid level at given points, the device is provided with tank circuits excited by the oscillator at the same time with the detector. The tank circuits are tuned to the frequencies determined by the given values of the measured level. With the coincidence of the resonance frequency of the detector and the resonance frequency of the corresponding tank circuit, the signal

Card 1/2 UDC: 681.128.82

from the tank circuit is fed in parallel with the detector signal to the inputs of coincidence circuits which are connected to the signal device (see Fig. 1).

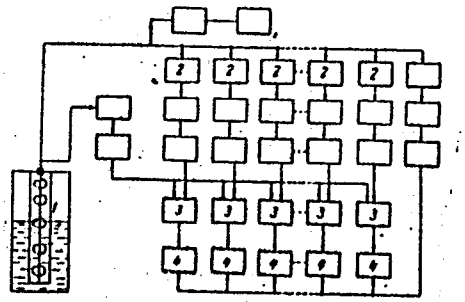


Fig. 1. 1- detector; 2- tank circuits; 3- coincidence circuits; 4- signal device

Orig. art. has: 1 diagram.

SUB CODE: EC/ SUBM DATE: 28Mar64

Card 2/2

L 7639-66 EWT(1)/EWA(h)/ETC(m) WW

ACC NR: AP5025053 SOURCE CODE: UR/0286/65/000/016/0092/0092

AUTHORS: Viktorov, V. A.; Petrov, B. N.; Abramov, A. S.; Maslov, G. S.; Khokhlov, V. P.; Samsonov, G. A.

ORG: none

39
B

TITLE: Resonance level gauge. Class 42, No. 173974

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 16, 1965, 92

TOPIC TAGS: liquid level indicator, resonator, electronic circuit, electronic oscillator

ABSTRACT: This Author Certificate presents a resonance level gauge containing a frequency-modulated oscillator for exciting the resonance detector and tank circuits tuned to the frequencies corresponding to the discrete values of the measured level divided in height at equal intervals. To increase the accuracy of digital level measurement with nonlinear variation of the detector and oscillator output characteristics, the gauge is provided with a device in the form of trigger counters. These counters determine the number of scale pulses from the tank circuits given off with the coincidence of the oscillator frequency and the resonance frequency of the corresponding tank circuit until the appearance of the detector

Card 1/3 UDC: 681.128.82

pulse. The gauge is also provided with a device for determining the time lag of the detector pulse relative to the immediately preceding scale pulse. These devices are connected through controllable logic switch elements respectively to the output of the tank circuits and to the output of the clock oscillator (see Fig. 1).

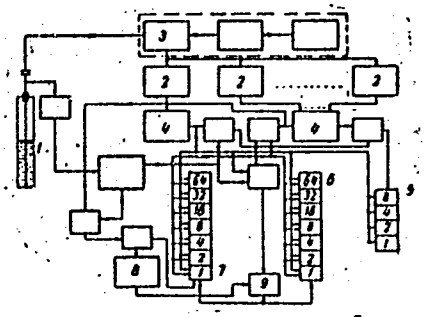


Fig. 1. 1- detector; 2- tank circuits; 3- frequency-modulated oscillator; 4- scale pulse counter; 5- counter for time lag of detector pulse relative to immediately preceding scale pulse; 6- logic elements; 7- switches; 8- clock oscillator; 9- counter for determining time interval between two scale pulses

To increase the accuracy of measurements, the gauge is provided with a device for determining the time interval between scale pulses. The device is in the form of a trigger counter connected to the clock oscillator by two electric channels with switches. One of the switches is controlled by the logic elements. The

L 7639-66

ACC NR: AP5025053

other is opened by the detector pulse and is closed by the immediately following scale pulse. Orig. art. has: 1 diagram.

SUB CODE: EC/ SUBM DATE: 28Mar64

Card 3/3

VIKTOROV, V.A. (Moskva)

Study of the dynamics of an optimalizing network of an endovibration level meter and methodology for calculating its principal parameters. Avtom. i telem. 24 no.11:1583-1588 N '63.
(MIRA 16:12)

L 60213-65 EWT(d)/EWT(l)/EEC(m)/EWA(d)/EWP(v)/EWP(k)/EWP(h)/EWA(h)/EWP(l)/EPR/ETC(m) Po-4/Pq-4/Pf-4/Ps-4/Pl-4 WW

ACCESSION NR: AP5019059 UR/0286/65/000/012/0087/0087

47

AUTHORS: Viktorov, V. A.; Petrov, B. N. 44 44 qM B

TITLE: A method for measuring the liquid level in vessels. Class 42, No. 172078

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 87

TOPIC TAGS: liquid level, liquid level gage, resonance frequency, electromagnetic oscillation

25 14,44

ABSTRACT: This Author Certificate presents a method for measuring the liquid level in vessels by comparing the resonance frequencies of electromagnetic oscillations induced in the vessel along two dissimilar high frequency ducts made in the form of rods analogous in shape, with current-conducting elements (rings, spirals, etc) uniformly distributed along their lengths. To increase the measurement accuracy under the varying electromagnetic properties of a liquid and the state of the ambient medium, the step-wise output characteristics of the ducts are offset in respect to one another by a magnitude equal to one half of a step. The level is then estimated from the coincidence of the resonance frequencies of both ducts.

ASSOCIATION: none

SUBMITTED: 14Jul64 ENCL: 00 SUB CODE: IE

NO REF SOV: 000 OTHER: 000

Card 1/1 dm

L 3559-66 EWT(1)/EWA(h)/ETC(m) WW
ACCESSION NR: AP5024413 UR/0286/65/000/015/0093/0093

17
B

AUTHORS: Viktorov, V. A.; Petrov, B. N.; Chistyakov, N. N.

TITLE: Level detector for discrete resonance level gauges. Class 42, No. 173447

25

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 15, 1965, 93

TOPIC TAGS: liquid level indicator

ABSTRACT: This Author Certificate presents a level detector for discrete resonance level gauges, containing two high frequency channels similarly made in the form of rods with conducting elements (rings, spirals, etc) equally spaced along the length of the rod (see Fig. 1 on the Enclosure). To increase the accuracy of measurement with changes in the electromagnetic properties of the medium, the rods with the conducting elements are shifted in height so that their output step characteristics are shifted relative to each other by half a step. Orig. art. has: 1 diagram.

ASSOCIATION: none
SUBMITTED: 28Jul64 ENCL: 01 SUB CODE: IE

NO REF SOV: 000 OTHER: 000

Card 1/2

L 3559-66

ACCESSION NR: AP5024413

ENCLOSURE: 01

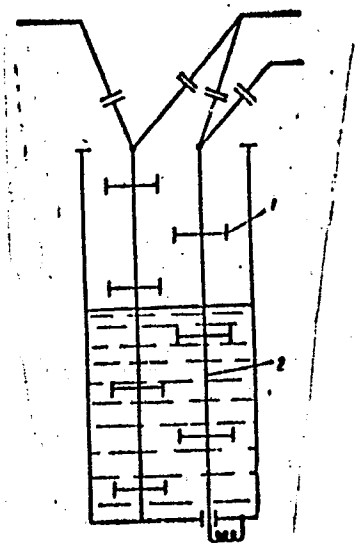


Fig. 1.
1- conducting elements; 2- rods

Card 2/2

VIKTOROV, V.A. (Moskva); PALEVICH, L.G. (Moskva)

Optimalizing endovibration level gage. Avtom. i telem. 24 no.10:1422-1426 O '63. (MIRA 16:11)

55

VIKTOROV, V. A.

PHASE I BOOK EXPLOITATION SOV/6012

Akademiya nauk SSSR. Institut avtomatiki i telemekhaniki.

Avtomaticheskoye regulirovaniye i upravleniye (Automatic Regulation and Control) Moscow, Izd-vo AN SSSR, 1962. 526 p. Errata slip inserted. 9000 copies printed.

Resp. Ed.: Ya. Z. Tsypkin, Professor, Doctor of Technical Sciences; Ed. of Publishing House: Ye. M. Grigor'yev; Tech. Ed.: I. M. Dorokhina.

PURPOSE: This book is intended for scientific research workers and engineers concerned with automation.

COVERAGE: The book is a collection of articles consisting of papers delivered at the 7th Conference of Junior Scientists of the Institute of Automation and Telemechanics, Academy of Sciences USSR, held in March 1960. A wide range of scientific and technical questions relating to automatic regulation and control is covered.

Card 1/12

The articles are organized in seven sections, including automatic control systems, automatic process control, computing and decision-making devices, automation components and devices, statistical methods in automation, theory of relay circuits and finite automatic systems, and automated electric drives. No personalities are mentioned. References are given at the end of each article.

TABLE OF CONTENTS:

PART I. AUTOMATIC CONTROL SYSTEMS

Andreychikov, B. I. The effect of dry friction and slippage [play] on error during reverse gear operation of servo-feed systems 3

Andreychikov, B. I. Dynamic accuracy of machine tools with programmed control 14

PART II. AUTOMATIC PROCESS CONTROL

Viktorov, V. A. Effect of the higher harmonics of a coaxial vibrator on the efficiency of an extremal resonant cavity level gauge 200

Gushchin, Yu. V. New types of radioactive emission detectors 212

Kalmakov, A. A. Automatic control by x-ray spectrometry of metallic composition in alloys and nonferrous-metal ore concentrates 222

Prusov, M. A. Measuring the temperature of rotating parts 231

L 38263-65 EWT(l)/EPR/EWA(h)/EWA(m)-[illegible] Ps-4/Pab [illegible]

ACCESSION NR: AP5[illegible] [illegible]/65/000/000/0079/0080

AUTHORS: [illegible]orov, V. A.; [illegible] [illegible]yavtseva, [illegible] N.

TITLE: Cavity resonator level gauge with time sweep. Class 42, No. [illegible]

SOURCE: Byulleten' izobr[illegible]eniy i tovarnykh znakov, no. 5, 1965, 79-80

TOPIC TAGS: level gage, cavity resonator

ABSTRACT: This Author Certificate presents a cavity resonator level gauge with time sweep containing a high-frequency generator for excitation of electromag- [illegible]

[illegible]

high-frequency generator frequency with the resonance frequency corresponding

Card 1/3

L 38263-65

ACCESSION NR: AP5003017

to the empty container. The peak detector measures the maximum value of the

[illegible] information of the level gauge scale by changing the slope of the saw-tooth voltage in correspondence with the resonance frequency of the reference detector. Orig. art. has: 1 diagram.

[illegible]

SUBMITTED: 15Apr63 ENCL: 01 SUB CODE: AC, IC

NO REF SOV: 000 OTHER: 000

ACC NR: AP7002095 SOURCE CODE: UR/0103/66/000/012/0136/0143

AUTHOR: Viktorov, V. A. (Moscow)

ORG: none

TITLE: Fundamentals of the theory of discrete resonance level transducers

SOURCE: Avtomatika i telemekhanika, no. 12, 1966, 136-143

TOPIC TAGS: resonance line, error, signal analysis, transducer, resonance level transducer, resonance level

ABSTRACT: Transducers for multi-position level signalling devices based on the use of resonance properties of segments of inhomogeneous long lines are discussed. Their specific features are presented and areas of application are determined. Fundamentals of the theory of such transducers are discussed and the methods of analysis and synthesis are presented using a transducer with ring sensitive elements as an example. An extimation of the main procedural errors is given. Orig. art. has: 3 figures and 15 formulas. [Author's abstract] [AM]

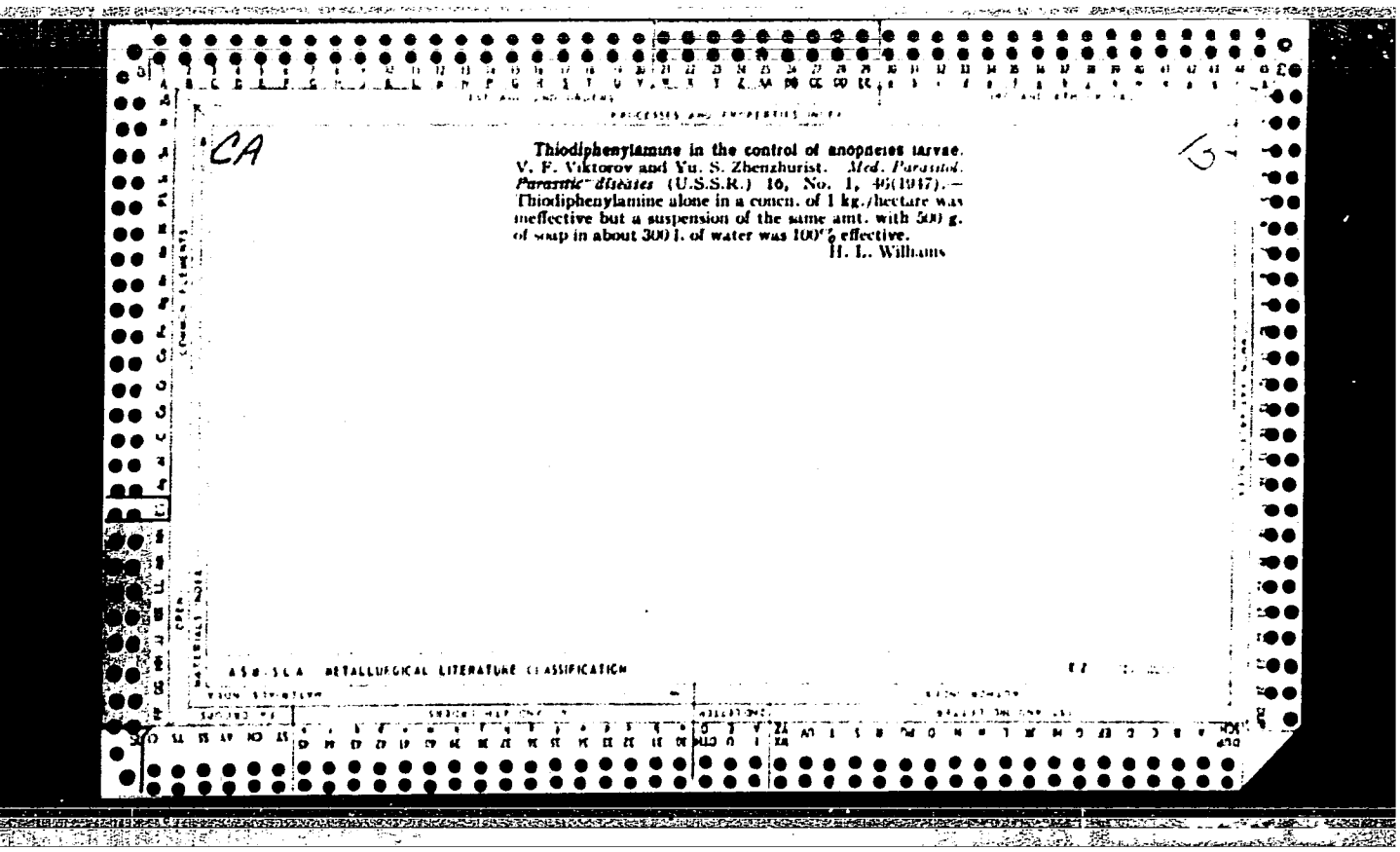
SUB CODE: 20/SUBM DATE: 30Oct65/ORIG REF: 005/

Card 1/1 UDC: 681.128.084.2

VIKTOROV, V.F.

Secondary quartzite in the Almalyk region. Uzb. geol. zhur. 9 no.4: 64-69 '65. (MIRA 18:9)

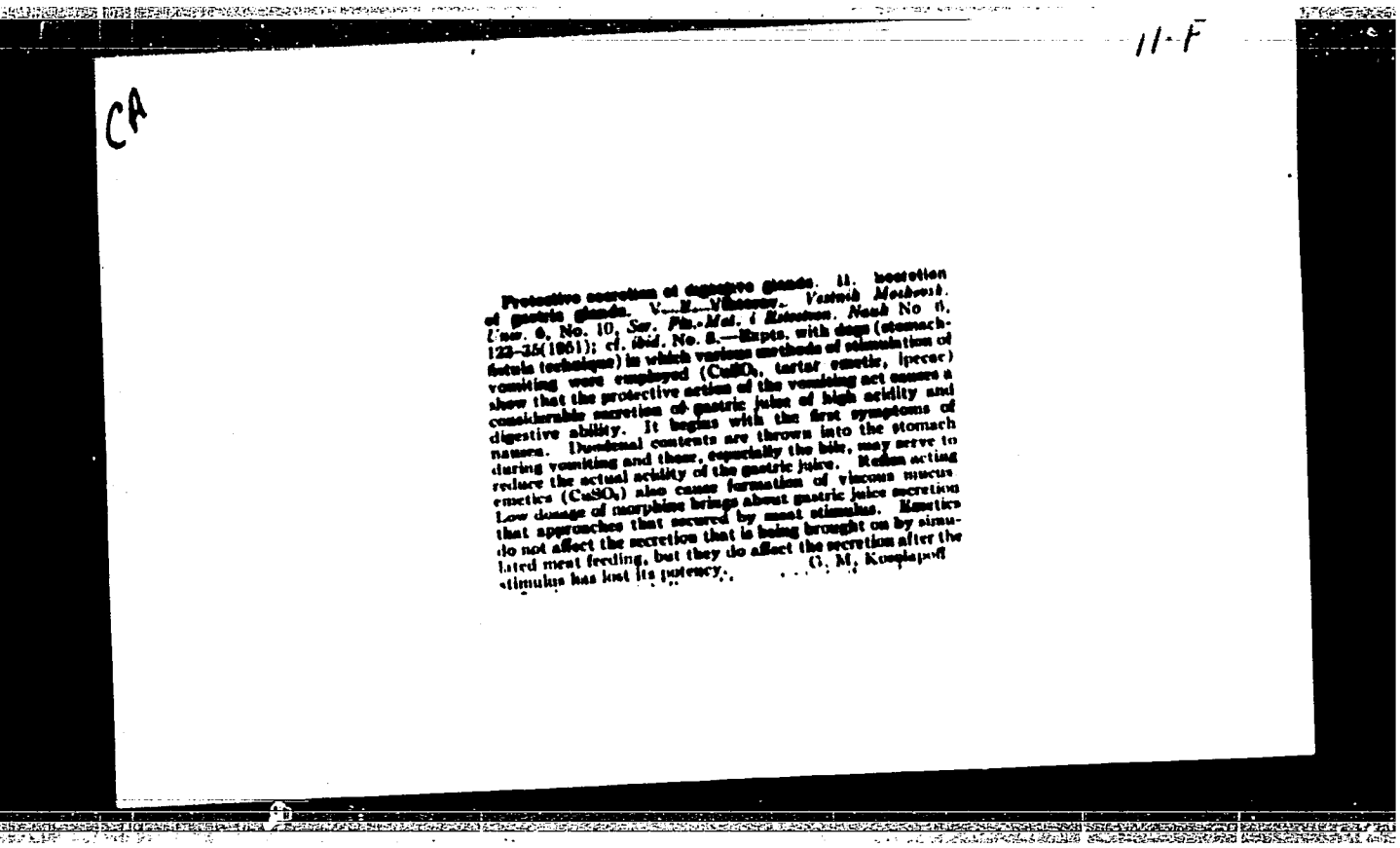
1. Almalykskaya geologo-razvedochnaya ekspeditsiya Gosudarstvennogo geologicheskogo komiteta UzSSR.



CA

Thiodiphenylamine in the control of anopheles larvae. V. F. Viktorov and Yu. S. Zhenzhurist. *Med. Parasitol. Parasitic Diseases* (U.S.S.R.) 16, No. 1, 46(1947).—Thiodiphenylamine alone in a concn. of 1 kg./hectare was ineffective but a suspension of the same amt. with 500 g. of soap in about 300 l. of water was 100% effective.
H. L. Williams

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



CA

11-F

Protective secretion of digestive glands. II. Secretion of gastric glands. V. M. Vinogrov. *Voinsk Meditsinsk. Uzur.* 6, No. 10, *Sur. Pib.-Mal. i Ranenion. Nauk* No 6, 123-35(1961); cf. *ibid.* No. 8.—Expts. with dogs (stomach-fistula technique) in which various methods of stimulation of vomiting were employed ($CuSO_4$, tartar emetic, Ipecac) show that the protective action of the vomiting act causes a considerable secretion of gastric juice of high acidity and digestive ability. It begins with the first symptoms of nausea. Duodenal contents are thrown into the stomach during vomiting and these, especially the bile, may serve to reduce the actual acidity of the gastric juice. Reflex acting emetics ($CuSO_4$) also cause formation of viscous mucus. Low dosage of morphine brings about gastric juice secretion that approaches that secured by meat stimulus. Emetics do not affect the secretion that is being brought on by simulated meat feeding, but they do affect the secretion after the stimulus has lost its potency. G. M. Kosolapoff

VIKTOROV, V. F.

Protective secretion of digestive glands. III Secretion of pancreas. V. F. Viktorov. *Vestnik Moskov. Univ.* 7, No. 12, *Ser. Fiz.-Mat. i Estestven. Nauk* No. 8, 77–84 (1952); cf. *C.A.* 46, 7036c.—In the act of vomiting induced by various agencies in hungry dogs there is induced a considerable secretive action by the pancreas. The pancreatic juice has a high level of digestive power. The secretion begins with the first signs of nausea or vomiting and continues for 4–5 hrs. The secretion of pancreatic juice induced by fat or meat is not hindered or blocked by vomiting, and on the other hand is often enhanced by it. Introduction of apomorphine into the dog leads to initiation of pancreatic secretion within 5–6 min. simultaneously with vomiting activity; morphine introduced at low dosage also acts similarly within 5 min., but at higher dosage (0.02 g. or more) there is mild secretion and after 1–2 hrs. the dog falls asleep and secretion stops; secretion resumes after wakening and may rise for 6–7 hrs. Both morphine and apomorphine cause a relatively mild level of pancreatic secretion.

G. M. Kosolapoff

VIKTOROV, V. F.

Protective secretion of digestive glands. IV. Secretion of intestinal juice and bile. V. F. Viktorov. *Vestnik Moskov. Univ.* 8, No. 2, *Ser. Fiz.-Mat. i Estestven. Nauk* No. 1, 99–105 (1953); cf. *ibid.* 7, No. 12 (1952); *C.A.* 46, 7638c.—Expts. with hungry dogs showed: centrally and peripherally active emetics (I) increase the secretion of intestinal juice (Thiry-Vella technique) with and without mech. irritation (by introduced tube). After a latent period of 5–6 min. the secretion begins with the beginning of nausea. The digestive power of juice is increased. Morphine decreases secretion caused by mech. irritation. The bile secretion (II) (Dastre's gall bladder fistula) is strongly increased by I. Morphine in small doses (0.01 g.) slightly increases II and then decreases it.

A. Sementsov

VIKTOROV, V.F.

Protective secretion of digestive glands. Report no. 4. Secretion of intestinal juice and bile. Vest.Mosk.un. 8 no.2:99-105 F '53. (MLRA 6:5)
(Fluids and humors, Animal)

VIKTOROV, V. F.

USSR/Biology - Physiology

Card 1/1 Pub. 129-13/23 FD-1149

Author : Viktorov, V. F.

Title : Protective secretions of the digestive glands. Report 5, the effect of mechanical and certain chemical stimulants and the biological significance of the secretory reaction.

Periodical : Vest. Mosk. un., Ser. fizikomat. i yest, nauk, 9, No 7, 103-110, Oct 1954

Abstract : The role of the digestive glands of dogs during emesis caused by pharmaceutical, chemical, and mechanical emetic stimulants was investigated. Significant quantities of digestive gland secretions, whose principal function was that of lubrication, were detected. The results of the investigations are presented on 7 charts. Three Soviet references are cited.

Institution :

Submitted :

VIKTOROV, V.F.

Protective secretions of the digestive glands. Report no.5: Effect of mechanical and some chemical stimuli and the biological significance of the secretary response. Vest.Mosk.un.9 no.10:103-110 '54. (MIRA 8:2)
(Stomach--Secretions) (Salivary glands)

VIKTOROV, V.F.

Postmagmatic alteration of rocks in the Almalyk region. Uzb. geol. zhur. 8 no.1:27-35 '64. (MIRA 18:5)

1. Almalykskaya geologo-razvedochanaya ekspeditsiya.

VIKTOROV, V.F.

Structural position of the Sary-Cheku copper-molybdenum deposit. Vop.geol.Uzb. no.2:22-34 '61. (MIRA 15:12)
(Kurama Range—Geology, Economic)

VIKTOROV, Z.F.; MIKHAYLOV, G.M.; KULIKOV, M.D., kontr-admiral zapasa, nauchnyy red.; VOROB'YEV, G.S., red. izd-va; GURDZHIYEVA, A.M., tekhn. red.

[Navies of the United States and Great Britain] Voenno-morskie floty SShA Velikobritanii. Leningrad, Ob-vo po raspr. polit. i nauchn. znanii RSFSR, 1961. 61 p. (MIRA 14:8)
(United States—Navy) (Great Britain—Navy)

VIKTOROV, V.I. (Maykain, Kazakhskaya SSR)

Mining settlement in the steppe. Zdorov'e 7 no. 2:3 F '61.
(MIPA 14:2)

(MAIKAIN—MINERS—DISEASES AND HYGIENE)

VIKTOROV, V.M., inzhener.

Bases of economy in building automobile roads. Avt. dor. 19 no.10:6-7 O '56. (MLRA 9:12)

(Road construction)

VIKTOROV, Vasiliy Mikhaylovich; DOBROKHOTOV, S.N., red.

[Economic surveys of transportation centers] Ekonomicheskie izyskaniia transportnykh uzlov. Moskva, Transport, 1964. 174 p. (MIRA 18:3)

VIKTOROV, V. N.

AID - P-193

Subject : USSR/Engineering

Card : 1/1

Author : Victorov, V. N.

Title : The Effect of the Centrifugal Force of the Earth's Rotation on the Formation of Oil and Gas Deposits

Periodical : Neft. khoz., v. 32, #2, 42-46, F 1954

Abstract : Various theories of the formation of oil and gas deposits are outlined. The significance of the centrifugal force of the earth's rotation, Coriolis force and flooting force (Darcet formula) are discussed and graphically analysed. Five illustrations and 1 table with computed data.

Institution : None

Submitted : No date

BERNSHTEYN, P.B.; VIKTOROV, V.P.

Over-all mechanization and automation of shop No. 1 of the Semiluki Refractories Plant. Ogneupory 26 no.11:513-519 '61. (MIRA 17:2)

1. Vsesoyuznyy institut ogneuporov.

VIKTOROV, Vikentiy Pavlovich

[Automation of refractories production] Avtomatizatsiia ogneupornogo proizvodstva. Moskva, Metallurgiia, 1966. 246 p. (MIRA 19:1)

BLAGONRAVOV, S.I.; BREK, B.M.; BYAKOV, P.T.; VIKTOROV, V.S.; VAGANOV, V.I.; GUSEV, S.A.; GLEBOV, V.V.; GURILEV, A.M.; DANILOV, G.D.; ZAV'YALOV, V.G.; IOFFE, Ye.F.; IZVEKOV, G.M.; KONOVALOV, S.A.; KULIGIN, A.S.; KASATKIN, A.P.; KUZNETSOV, N.I.; LEBEDEV, A.I.; LEMPERT, Ye.N.; MARGEVICH, Ya.I.; MAYZEL', M.A.; MITYAKOV, V.S.; NOSKOV, M.M.; RYABCHIKOV, M.Ya.; RATSMAN, N.I.; TVOROGOV, M.K.; UGOL'NIKOV, V.Ya.; KHAR'KOV, G.I.; CHADOV, S.L.

Lev Mil'evich Matveev; obituary. Torf. prom. 38 no.4:38 '61. (MIRA 14:9)

(Matveev, Lev Mil'evich, 1914-1961)

VIKTOROV, Veniamin Samuilovich; GIL'GULIN, M., red.; KLIMOVA, T., tekhn.red.

[Scientist and patriot (I.M.Gubkin)] Uchenyi-patriot (o I.M. Gubkine). Moskva, Gos.izd-vo polit.lit-ry, 1960. 29 p. (MIRA 14:4)

(Gubkin, Ivan Mikhailovich, 1871-1939)

L 18742-63 EWT(m)/BDS ASD
ACCESSION NR: AT3002206 S/2941/63/001/000/0128/0131

AUTHORS: Andreyeshchev, Ye. A.; Baroni, Ye. Ye.; Viktorova, V. S.; Kovy*rzina, K. A.; Rozman, I. M.; Shoniya, V. M.

TITLE: Excitation energy transfer in solid solutions of organic substances. 2

SOURCE: Optika i spektroskopiya; sbornik statey, v. 1: Lyuminestsentsiya. Moscow, Izd-vo AN SSSR, 1963, 128-131

TOPIC TAGS: phosphorescence, donor, acceptor, induction resonance

ABSTRACT: Phosphorescent quenching of the donor energy and the excitation energy transfer from donor to acceptor were studied in several organic substances. The solvents and solutes are listed. The experimentally determined radiationless transfer parameter p_t (defining optical characteristic of the donor and acceptor molecules and the dielectric property of the media) was found to be consistently higher (about 1.8 times) than the value determined analytically by the induction resonance theory. Orig. art. has: 3 figures, 3 tables, and 3 formulas.

ASSOCIATION: none

Card 1/1

VIKTOROV, V.V. (Moskva); STEPANOV, R.D. (Moskva)

Simulation of the action of a blast with concentrated charges in similar soils. Inzh.sbor. 28:87-96 '60. (MIRA 13:10)
(Blasting)

VIKTOROV, Ye.

For the trade-union key workers ("Public inspector in industrial hygiene" by M. TSyganov. Reviewed by E. Viktorov). Okhr. truda i sots. strakh. no.4:89-90 Ap '59. (MIRA 12:8)
(Industrial hygiene)
(TSyganov, M.)

VIKTOROV, Ye.

Youthfulness of an ancient city. Okhr.truda i sots.strakh. no.5:21-25 N '58. (MIRA 12:1)
(Kolomna--Machinery industry--Hygienic aspects)

VIKTOROV, Ye.(g.Moskva)

Force of an anxample. Prom.koop. 13 no.9:27 S '59.
(MIRA 13:1)

(Inventions, Employees')

VIKTOROV, Ye.D. (Leningrad)

Stabilization of a control system by the introduction of nonlinear compensation. Izv AN SSSR Tekh. kib. no.1:196-201 Ja-F '64 (MIRA 17:8)

VIKTOROV, Ye.D. (Leningrad)

Random motion of a particle above a vibrating plane. Izv.AN SSSR.Otd. tekh.nauk.Mekh.i mashinostr. no.5:137-138 S-O '62. (MIRA 15:10)
(Motion)

VIKTOROV, Ye.D. (Leningrad)

Calculation of the damping coefficient of free oscillations of a viscous fluid in a cylindrical container. PMTF no.2:143-146 Mr-Ap '65. (MIRA 18:7)

VIKTOROV, Ye.D.

Calculating the attenuation ratio of natural vibrations of a viscous fluid in a cylindrical vessel. Trudy LPI no.235:7-11 '64. (MIRA 17:11)

VIKTOROV, Ye.D.

Stability of a self-adjusting filter. Trudy LPI no.235:63-66 '64.
(MIRA 17:11)

RUSHKOVSKIY, T.V.; ZUBCHENKO, P.I., nauchnyy sotr.; ZUBCHENKO, T.S., nauchnyy sotr.; YARMOLENKO, I.M., nauchn. sotr.; VRZHESHCH, Ye.S., nauchn. sotr.; ZAPOL'SKAYA, V.A., nauchn. sotr.; VIKTOROV, Ye.P., nauchn. sotr.; RYMARENKO, V.S., agronom; BUSLENKO, I.T., agronom; SAZONOV, V.V., red.; LEVINA, L.G., tekhn. red.

[Sugar beet in Siberia] Sakharnaia svekla v Sibiri. Moskva, Izd-vo M-va sel'.khoz.RSFSR, 1960. 206 p. (MIRA 15:1)

1. Glavnyy agronom po sakharnoy svekle Altayskogo krayevogo upravleniya sel'skogo khozyaystva (for Rushkovskiy). 2. Biyskaya opytno-selektsionnaya stantsiya po sakharnoy svekle (for Zubchenko, P.I., Zubchenko, T.S., Yarmolenko, Vrzheshch, Zapol'skaya, Viktorov). (Siberia—Sugar beets)

L 23636-65 EWT(m)/EWP(j) Pc-4 RM S/0191/65/000/001/0023/0027

ACCESSION NR: AP5002824

AUTHOR: Militskova, Ye. A.; Viktorov, Ye. S.; Sokolov, A.D.; Kostikov, V.P.

TITLE: The die casting of polyformaldehyde

SOURCE: Plasticheskiye massy, no. 1, 1965, 23-27

TOPIC TAGS: polyformaldehyde, die casting melt index, impact toughness, bending strength, frost resistance, polymer crystal structure, mold stability, polymer inflammability, plastic casting

ABSTRACT: The authors investigated the conditions of die casting and the properties and fields of application of cast polyformaldehyde (PFA). The construction and outfitting of the die machine (heating cylinder, jet, die mold and temperature control) and the casting technique are described in detail. The die casting of PFA is possible only in a narrow temperature interval, 180-195C being most common. The stay of the material in the cylinder is calculated by formula; for a die machine with a plunger diameter of 40 mm and a 210C cylinder temperature, the time is 60 min. The optimum mold temperature (determined by article thickness) is 130C, the optimum casting pressure is 1200-1500 kgc/cm^2, and the duration of the casting cycle is about 10 sec./mm of article thickness. The casting temperature is dependent on the melt index of the PFA. Articles made from

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L 23636-65
ACCESSION NR: AP5002824

2

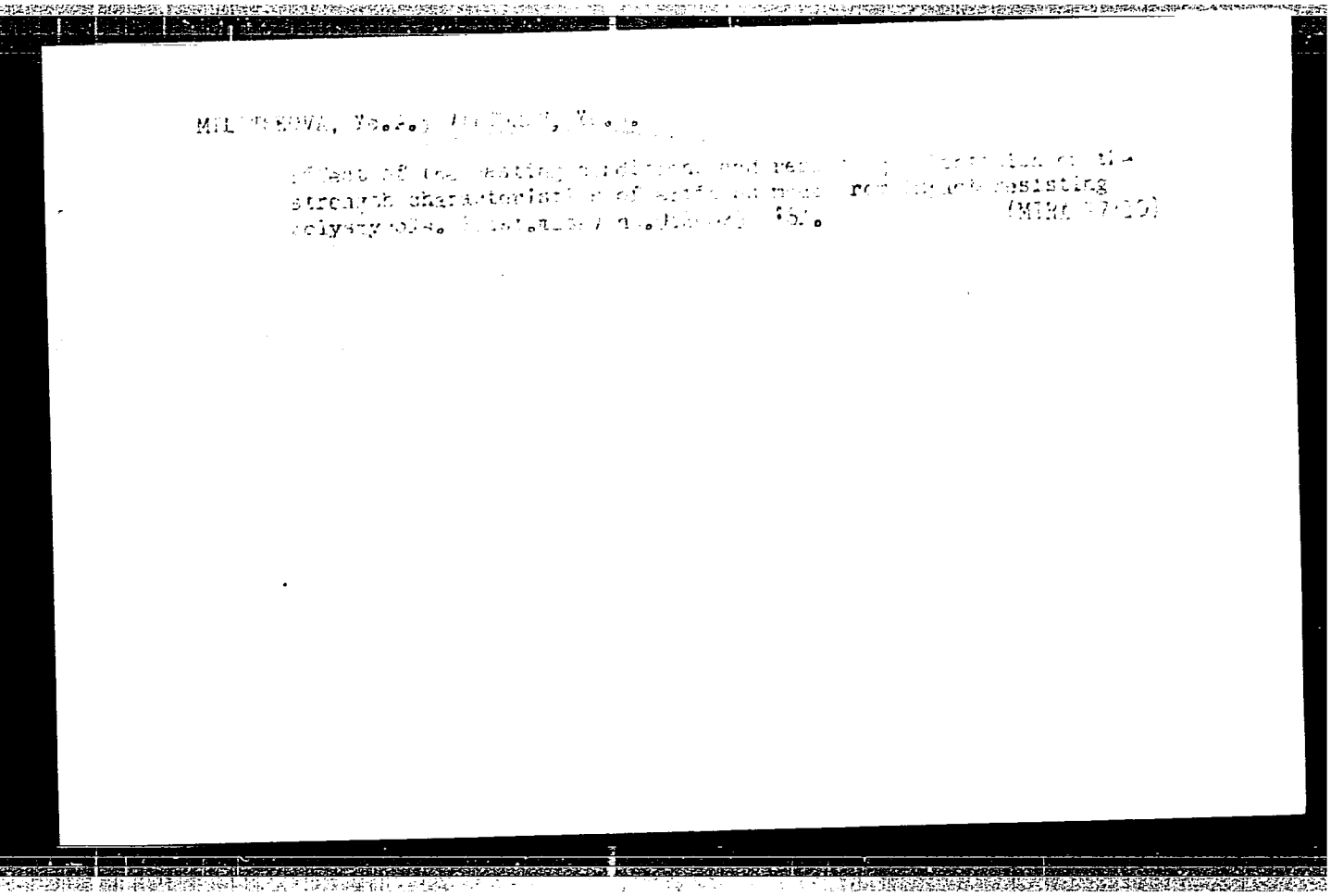
PFA are distinguished by their high impact toughness. An increase in the melt index produces a decrease in the impact toughness and bending strength. Frost resistance measurements show that the stability of PFA decreases at -40C, but still remains rather high. The crystal structure of PFA and its high melting point contribute to its mold stability at increased temperatures. PFA is stable in most inorganic and organic solvents and has a low inflammability. The physical-mechanical properties of PFA decline after recasting. Because of its high stability to wear, low coefficient of friction, dimensional and high-temperature mold stability, PFA can be used for the production of bearing, gears and latches. "V.P. Zhuravlev took part in designing the casting machine and L.A. Zavyalina took part in working out the casting conditions." Orig. art. has: 6 tables, 2 figures and 2 formulas.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MT

NO REF SOV: 000 OTHER: 005

Card 2/2



ACCESSION NR: AP4045019 S/0191/64/000/009/0020/0023

AUTHOR: Militskova, Ye. A., Viktorov, Ye. S.

TITLE: Effect of molding conditions and the resulting orientation on the strength properties of high-impact polystyrene products

SOURCE: Plasticheskiye massy*, no. 9, 1964, 20-23

TOPIC TAGS: polystyrene, impact strength, molding, flexural strength, polymer orientation, copolymer SNP-2

ABSTRACT: Standard polystyrene rods obtained under different molding conditions were tested for impact strength and orientation. It was found that the specific impact strength decreases considerably with increasing molding temperature, owing to the increased partial destruction of the material in the heating cylinder. The recommended molding temp. is 170-190C. The curve relating the impact strength of polystyrene to the time of the material under pressure shows that with increasing time (to a certain extent), the strength properties of the moldings are improved because of the resulting condensation of the material. However, in case of high-molecular-weight polystyrene, with its ability to orient in the melt, a prolonged stay in the mold under pressure gives negative results because of the increasing internal stresses. For polystyrene UP-2, the melting index is 1.5

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ACCESSION NR: AP4045019

times less than for the impact resistant polystyrene VP-11. For molding high-impact polystyrene, the material should be kept in the mold under pressure for 15-20 sec., including the time of introduction of the plunger. A molding temperature of 180C ensures the best filling of the molds at all pressures. It is more suitable to increase the pressure than the temperature. The specific impact strength of the products was determined at -40C. In all cases, the impact strength of polystyrene VP-P and UP-2 was 2-2.5 times as high at -40C as at +20C. This must be taken into account in molding. The effect of orientation on the flexural and impact strength was investigated on samples (10 x 15 mm) cut parallel and perpendicular to the flow direction of the material. The strength properties were better when the stress was applied perpendicularly to the flow direction. The molecular orientation obtained by molding can be fixed only in products in which the load acts in one direction. The greatest difference in strength was observed near the flow gate, where the material is under the greatest pressure and where the greatest orientation is found. The curves of specific impact strength and static flexural stress have well-defined minima arranged at different distances from the gate for different polystyrene samples. This distance depends on the flow of the material, which can be characterized by the melting index. The melding index of the copolymer SNP-2 at a maximum permissible mold temperature of 245C was 0.55, i.e. it was increased considerably. Orig. art. has: 7 figures.

Card 2/3

ACCESSION NR: AP4045019

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00 SUB CODE: MT

NO REF SOV: 003 OTHER: 002

3/3

Card

VIKTOROV, Ye.V., gvardii mayor

Ophthalmologic section of the Odessa hospital. Voen.-med. zhur. no.1: 85-86 Ja '59. (MIRA 12:3)

(HOSPITALS
in Russia (Rus))
ophthalmol. department of military hosp. (Rus))
(OPHTHALMOLOGY,
same)
(MEDICINE, MILITARY AND NAVAL,
same)

VIKTOROV, Yu. (Moskovskaya oblast')

Contactless electronic fishing rod and lure. Radio no.9:44 S '65. (MIRA 19:1)

SMOLIN, D.D.; RAZBITNAYA, L.M.; VIKTOROV, Yu.M.

2,2'-Diaminodiethylsulfide of N,N,N',N'-tetraacetic acid and some inner-complex compounds. Zhur. ob. khim. 34 no.11: 3713-3715 N '64 (MIRA 18:1)

VIKTOROV-NABOKOV, O.V.

Determining the weight of the blowfly Calliphora erythrocephala Mg. by the weight of its pupae. Vop. ekol. 4:95-96 '62. (MIRA 15:11)

1. Gosudarstvennyy universitet, Kiyev.
(Blowflies) (Entomological research)

FRANTSEVICH, L.I.; VIKTOROV-NABOKOV, O.V.

Administering small quantities of venom with a calibrated capillary tube. Lab. delo 8 no.4:58-59 Ap '62. (MIRA 15:5)

1. Laboratoriya entomologii (zav. G.I. TSiryanin) Kiyevskogo gosudarstvennogo universiteta.
(TOXICOLOGY--EQUIPMENT AND SUPPLIES)

VIKTOROV-NABOKOV, O.V.; FRANTSEVICH, L.I.

Development of adaptation to poisons in the populations of arthropods. Vop. ekol. 7:24-25 '62. (MIRA 16:5)

1. Kiyevskiy gosudarstvennyy universitet.
(Resistance to insecticides)

VIKTOROV-VOSTOKOVA, Ye. A.

"Geobotanical methods of ground water study."
Presented at the Symposium on Methods of Evaluating Resources of Underground Water with Emphasis on Arid Zone Problems, Athens 11-20 Oct 1961

OCHKIN, V.F.; VNUKOV, V.I.; GORODKOV, N.I.; LOVTSOV, A.P.; VIKTOROVA, A.G.; SOKOLOVA, Ye.Ya.; KOZLOV, A.N.; DRYUCHIN, A.P., obshchiy red.

[Economy of Saratov Province; statistical collection] Narodnoe khoziaistvo Saratovskoi oblasti; statisticheskii sbornik. Saratov, Gos.statisticheskoe izd-vo, 1959. 205 p. (MIRA 12:11)

1. Saratov (Province) Statisticheskoye upravleniye. 2. Nachal'nik Statisticheskogo upravleniya Saratovskoy oblasti (for Dryuchin).
(Saratov Province--Statistics)

VIKTOROV, Yuriy Vsevolodovich; GDALIN, Aleksandr Davidovich; LEBEDEV, Ivan Yevstifeyevich; SOBOLEV, N.N., red.

[Introduction of progressive practices and highly efficient equipment at the "Rovnoe" granite quarry] Vnedrenie progressivnoi tekhnologii i vysokoproizvoditel'nogo oborudovaniia na granitnom kar'ere "Rovnoe." Leningrad, 1964. 13 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Stroitel'noe proizvodstvo, no.2) (MIRA 17:7)

L 6711-65 EWT(d)/EWT(m)/EEC-4/EWP(j)/T Pn-4/Pc-4/Pac-4 SSD/AFWL/AS(mp)-2/
ESD(ge)/ESD(t) RM
ACCESSION NR: AP4044095 S/0141/64/007/003/0415/0423

66
63

AUTHOR: Viktorova, A. A.

TITLE: On the rotational spectrum and absorption intensity of water vapor dimers in the atmosphere. I. Configuration of dimer with linear hydrogen bond

SOURCE: IVUZ. Radiofizika, v. 7, no. 3, 1964, 415-423

TOPIC TAGS: water, radio wave absorption, molecular structure, hydrogen bond

ABSTRACT: The author considers dimers whose concentration is maximal among all other water-vapor polymers, in view of the considerable interest that attaches to knowledge of the spectrum of this compound in calculations of the absorption of radio waves in the millimeter and submillimeter band propagating in the atmosphere. Only the configuration of the water-vapor dimers is calculated in the

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present article. The water-vapor dimer model is considered in the framework of the theory of the hydrogen bond. The relative orientation of the molecules and the potential barrier of internal rotation is calculated on the basis of a point-like model of the water molecule. The mutual orientation of the water molecules in the dimer is determined from the character of the forces binding the molecule. It is shown that the model of the open structure of the dimer used in the article is more stable than other dimer structures (cyclic or bifurcational structure). The coordinates of all the charges of both molecules are determined, and the potential barrier for internal rotation is found to be approximately 1.3 kcal/mole. It is shown that the expression for the interaction potential, using the point model of the water molecule, can also be derived from a rigorous quantum-mechanical analysis of the problem. The accuracy of the point approximation is estimated. "In conclusion, I am deeply grateful to S. A. Zhevakin for continuous interest and help with the work and to N. D. Sokolov for valuable remarks." Orig. art.

L 6711-65
ACCESSION NR: AP4044095

has: 5 figures, 2 tables, and 7 formulas.

ASSOCIATION: Nauchno issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete (Scientific Research Radiophysics Institute at the Gor'kiy University)

SUBMITTED: 17Jun63 ENCL: 00

SUB CODE: EC , NP NR REF SOV: 004 OTHER: 014

Card 3/3

ACC NR: AP7002382 SOURCE CODE: UR/0020/66/171/005/1061/1064

AUTHOR: Viktorova, A. A.; Zhevakin, S. A.

ORG: Scientific Research Institute of Radiophysics at Gor'kiy State University im. N. I. Lobachevskiy (Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom gosudarstvennom universitete)

TITLE: Atmospheric absorption of microwaves by water vapor dimers

SOURCE: AN SSSR. Doklady, v. 171, no. 5, 1966, 1061-1064

TOPIC TAGS: radio wave, radio transmission, radio wave absorption

ABSTRACT: The author reviews the theory of microwave absorption by atmospheric gases and water vapor. Although measurements of microwave absorption by oxygen are in good agreement with those predicted, the results of measurements of water vapor absorption are about two times greater than theoretical values. Such a large discrepancy between measured and theoretical data cannot be explained by the presence of vapor isotopes or by an improperly chosen line breadth constant. The authors show that anomalous absorption by water vapor can be explained by the presence of dimer molecules of water vapor. Dimer absorption also explains the $(1/\lambda)_{ij} = 49.5\ cm^{-1}$ absorption line which is observed in the spectrograms

Card 1/2 UDC: 539.194:621.371.166.2

ACC NR: AP7002382

of water vapor. This absorption line cannot belong to the absorption spectrum of monomer water vapor. Orig. art. has: 1 figure and 1 formula.

SUB CODE:\7,09/ SUBM DATE: 07Feb66/ ORIG REF: 009/ OTH REF: 010
ATD PRESS: 5111

Card 2/2

L 8576-65 EWT(1)/FCC AS(mp)-2/SSD/APWL/ESD(gs)/SSD(t) RM/GW

ACCESSION NR: AP4044096 S/0141/64/007/003/0424/0431

AUTHOR: Viktorova, A. A.

TITLE: On the rotational spectrum and absorption intensity of water vapor dimers in the atmosphere. II. Dimer concentration. B

SOURCE: IVUZ. Radiofizika, v. 7, no. 3, 1964, 424-431

TOPIC TAGS: water, radio wave absorption, molecular structure, hydrogen bond

ABSTRACT: This is a direct continuation of the first part of the article (Izv. vy*ssh. uch. zav. - Radiofizika v. 7, 415, 1964; Accession Nr. AP4044095) and is devoted to a derivation of a general equation for the concentration of the water vapor dimers in the atmosphere. The determination

Card 1/2

L 8576-65

ACCESSION NR: AP4044096

a core comprising the first water molecule, and one asymmetrical top comprising the second molecule. The classical expression is used for the rotation sum. The approximations involved in the calculation are discussed briefly. It is found that there are approximately two dimers per hundred pair of water molecules. In the cases of the cyclic dimer configuration, the concentration is approximately 100 times smaller, so that cyclic dimers can be disregarded in considerations of the absorption of radio waves by water dimers in the atmosphere. "In conclusion, I thank S. A. Zhevakin for constant interest and valuable advice, and to N. D. Sokolov for attention and interesting remarks. Orig. art. has: 2 figures, 10 formulas, and 2 tables.

ASSOCIATION: Nauchno issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete (Scientific Research Radiophysics Institute at the Gor'kiy University)

SUBMITTED: 17Jun63 ENCL: 00

SUB CODE: EC NR REF SOV: 008 OTHER:

USSR/Cultivated Plants - Grains. II-4

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39182

Author : Viktorova, A.V.

Inst : Leningrad Agricultural Institute.

Title : The Influence of Growing Conditions on Productivity, and the Resistance of Winter Wheat Varieties to Failure to Reach Maturity by Shedding.

Orig Pub : Zap. Leningr. s.-kh. in-ta, 1956, vyp. 11, 367-373.

Abstract : Work was conducted on experimental plots of the Leningrad Agricultural Institute and in the kolkhoz of the Luzhskiy rayon, Leningr. obl. The use of N45P 120 K120 on growing plants considerably diminished the shedding incidence of the grain by increasing the quantity of mechanical tissue in ear-scales and by morphological alterations of the ear. This resistance is also retained in the following generations.

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USSR/Cultivated Plants - Grains. II-4

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39182

The yield increase obtained by using stepped up doses of phosphorus-potassium fertilizers takes place not only because of increased resistance of the grain to shedding, but also as a result of an increase in productive bushiness, the quantity of grain in each ear, and in the absolute weight of the grain. Different varieties react differently to fertilizers. The best reaction was obtained with the Obil'naup variety. -- V.A. Vinichkova.

Card 2/2

ALEKSANDROVA, Ye.V.; VIKTOROVA, A.V., nauchnyy rukovoditel', assistent

Mixed sowing of early and late varieties and hybrids of corn.
Sbor. nauch. trud. Ivan. sel'khoz. Inst. no.19:51-55 '62.
(MIRA 17:1)

VIKTOROVA, A.V., assistent

Comparative estimation of the productivity of different corn varieties. Sbor. nauch. trud. Ivan. sel'khoz. Inst. no.19: 48-50 '62. (MIRA 17:1)

1. Kafedra selektsii, plodoovoshchevodstva i zashchity rasteniy (zav. - dotsent V.S.Pavlenkov) Ivanovskogo sel'skokhozyaystvennogo instituta.

[redacted], I.I.; [redacted], V.. (Moskva)

Asymptotic normality in the problem of [redacted] probabilities of their falling into the boxes. [redacted]
i ee prim. 10 no.1:163-167 '65.

GOL'DSHTEYN, I.P.; FAYZI, N.Kh.; SLOVOKHOTOVA, N.A.; GUR'YANOVA, Ye.N.; VIKTOROVA, I.M.; KOCHESHKOV, K.A.

Diphenylethylene complexes with tin tetrachloride and organotin chlorides. Dokl.AN SSSR 138 no.4:839-842 Je '61. (MIRA 14:5)

1. Fiziko-khimicheskiy institut imeni L.Ya.Karpova. 2. Chlen-korrespondent AN SSSR (for Kocheshkov).
(Tin organic compounds) (Stilbene) (Tin chloride)
(Complex compounds)

VIKTOROVA, I.M.; SHEVERDINA, N.I.; DELINSKAYA, Ye.D.; KOCHESHKOV, K.A.

Organogallium compounds of the Ar_3Ga class and their dioxanates. Dokl. AN SSSR 152 no.3:609-610 S '63. (MIRA 16:12)

1. Fiziko-khimicheskiy institut im. L.Ya.Karpova. 2. Chlen-korrespondent AN SSSR (for Kocheshkov).

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5.3700

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S/020/61/138/004/013/023
B103/B203

AUTHORS: Gol'dshteyn, I. P., Fayzi, N. Kh., Slovokhotova, N. A., Gur'yanova, Ye. N., Viktorova, I. M., and Kocheshkov, K. A., Corresponding Member AS USSR

TITLE: Complexes of diphenyl ethylene with tin tetrachloride and organo-tin chlorides

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 138, no. 4, 1961, 839-842

TEXT: The authors studied complexes of asymmetric diphenyl ethylene (DPE) with $SnCl_4$, $C_6H_5SnCl_3$, and $(C_6H_5)_2SnCl_2$. The catalytic activity of $SnCl_4$ is explained with the formation of π-complexes with monomers without ever clarifying the nature of these complexes. The authors studied then by (A) infrared spectra, (B) electron spectra, and (C) dielectric polarization. In previous papers (I. P. Gol'dshteyn et al., Ref. 4: DAN, 136, No. 5 (1961)) it had been found by method (C) that the mentioned compounds formed a series according to their capability of forming complexes with dioxane: $SnCl_4 > C_6H_5SnCl_3 \gg (C_6H_5)_2SnCl_2$. The authors tried to find out whether or

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Complexes of diphenyl ethylene with tin...

not this series was also maintained in complexes with monomers. The following systems were studied: (a) $SnCl_4$ + DPE, (b) $C_6H_5SnCl_3$ + DPE, (c) $(C_6H_5)_2SnCl_2$ + DPE, (d) $SnCl_4$ + DPE + DPE-dimer, and (e) $C_6H_5SnCl_3$ + DPE + DPE-dimer. (A) The spectra were taken with a split-beam spectrophotometer H-800 (N-800) with fluorite cuvettes and Teflon insertions (20 μ). The mixtures were prepared in an airtight chamber in dry nitrogen and filled into cuvettes. $SnCl_4$ and $C_6H_5SnCl_3$ in DPE give green solutions with an absorption band 610 mμ and an intensive absorption below 500 mμ. (B) The electron spectra were taken with an CΦ-4 (SF-4) spectrophotometer in benzene solution. Results of (A). As compared with the spectra of pure DPE, the spectra of systems (a) and (b) show considerable changes: (1) The bands of the region 1612, 1420 - 1400, and 1335 cm^{-1} disappear, the intensity of the band 1578 cm^{-1} decreases strongly. They are all connected with the double bond in the molecule of diphenyl ethylene. The band 1615 cm^{-1} belongs to the stretching vibrations of the C = C double bond whose frequency is reduced owing to the conjunction with phenyl rings. The bands 1400 and 1330 cm^{-1} belong to the deformation vibrations of the methylene group on the double bond. The band 1578 cm^{-1} belongs to the vibrations of

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Complexes of diphenyl ethylene with tin...

the phenyl ring. Its intensity increases strongly due to the interaction with the conjugate double bonds. (2) New bands appear in the regions 1376, 1250, and 1220 cm^{-1}. (3) The band 1605 cm^{-1} of the benzene ring vibration is slightly shifted, and its intensity increases. Besides, the authors measured the spectrum of the solution of the DPE dimer in DPE to prove that the above-mentioned changes (1)-(3) are not connected with the appearance of the dimer in the above systems. This spectrum shows two additional bands which are absent in the spectrum of the monomer. The band 1665 cm^{-1} belongs to the stretching vibrations of the C = C bond in the dimer. The band 1285 cm^{-1} possibly belongs to the CH deformation vibrations on the double bond. None of these two bands appears in the spectra of systems (a) and (b). The authors consider this fact as a proof that the changes (1)-(3) in the infrared spectra are not caused by the dimer but by the intermediates of the interaction of DPE with the tin halides. Further spectral data suggest that the dimer also forms complexes with $SnCl_4$ and $C_6H_5SnCl_3$. (C) The authors measured the dipole moment of DPE in benzene solution with excess $SnCl_4$, and obtained the value 1D. Thus, it lies by 0.7-0.8 D higher than the dipole moment in benzene. For these reasons, the

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Complexes of diphenyl ethylene with tin...

authors think that the band 480 mμ (contrary to statements made by A. G. Evans et al. (see below)) cannot be explained with carbonium ions. The absorption band in the region 610 mμ may be ascribed to the π-complex. According to A. N. Terenin et al. (Ref. 10: Optika i spektroskopiya, 3, 480 (1957); Izv. AN SSSR, OKhN, 1958, 1100), the frequency of the valency formation decreases by 115-195 cm^{-1} in the complex formation from cyclohexane and $SnCl_4$; besides, absorption bands appear in the region 1400-1340 and 1200 cm^{-1}. The band 1525 cm^{-1} in systems (d) and (e) is ascribed to the reduced (by 140 cm^{-1}) frequency of vibrations of the double bond in the π-complex of the dimer with the tin halides. In contrast to systems (a) and (b), the authors had not found any indications of a formation of π-complexes in system (c). The solutions of the latter in benzene are colorless, and no changes were observed in their infrared spectrum as compared with the spectra of components. Thus, the authors proved that the above-mentioned order was also maintained in the case of complexes with monomers. They conclude that $C_6H_5SnCl_3$ can also be a catalyst for the polymerization of olefins whereas this cannot be expected for $(C_6H_5)_2SnCl_2$.

There are 3 figures, 1 table, and 10 references: 5 Soviet-bloc and 5 non-

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