

L 22870-65 EEC(d)-2/EPA(w)-2/ENG(k)/EWT(1)/EHC(t)/FPA(sp)-2/T/EWA(m)-2 Po-4/
ACCESSION NR: AP5002315 P1-4/Pz-6/Pab-10 IJ(c) 8/0141/64/007/005/0844/0847

AUTHOR: Shvilkin, B. N.; Vasil'yeva, M. Ya.; Zaytsev, A. A.

TITLE: Plasma noise of a high-frequency discharge in a magnetic field

SOURCE: Izv. Radiofizika, v. 7, no. 5, 1964, 844-847

TOPIC TAGS: plasma oscillation, high frequency plasma, high frequency discharge

ABSTRACT: The authors present data on noise arising in a high-frequency discharge in a magnetic field. The discharge was excited in a glass cylindrical tube with inside diameter 2.8 cm and with 72 cm between electrodes. A flat wall probe was placed in the central part of the tube. The alternating voltage with maximum values from 50 to 100 V (200 V) was applied to the internal electrode. The discharge was excited in a magnetic field of 0.1 to 0.2 kG. The tube was filled with pure helium and argon at pressures 0.01 to 0.1 mm Hg. A leak valve was used to maintain the gas pressure constant in the experimental tube. The noise was registered with a high-frequency selector microvoltmeter and a panoramic spectrum analyzer. The measured voltage was picked off the flat probe or a copper ring

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surrounding the tube. The experiments have shown that when the magnetic field rises above a critical value, noise sets in abruptly, with a spectrum ranging from several dozen kilocycles to several megacycles. The noise spectrum has a peak at low frequencies, with a width of several tenths of a megacycle. The maximum noise amplitude decreases with increasing pressure. At the critical magnetic field, the noise amplitude at a pressure of 100 mm Hg is about 10% of several megacycles. The noise spectrum is independent of pressure up to 100 mm Hg. At a higher pressure, the noise spectrum is independent of pressure up to approximately 100 V for helium and 300 V for argon. Further decrease in voltage causes a sudden increase in the critical magnetic field. The results are interpreted from the point of view of the theory of ion-sound and dissipative instability of an inhomogeneous magnetic plasma. With increasing magnetic field, the role of the ion-sound oscillation decreases. Orig. art. has: 1 figure and 2 tables.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: 27Jan64

ENCL: 00

SUB CODE: ME

NR REF SOV: 005

OTHER: 00,

Card 2/2

24(3)

AUTHORS:

Vasil'yeva, M. Ya., Zaytsev, A. A., Andryukhina, E. D.

SOV/48-23-8-13/25

TITLE:

Waves of Charge Density Oscillations in a Cylindrical Plasma

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959,
Vol 23, Nr 8, pp 995-998 (USSR)

ABSTRACT:

For acoustical waves which may develop in an ionized gas and for the associated electrostatic oscillations of positive ions, equation (1) is given in order to calculate the frequency of ionic oscillations. As shown by the present paper, wavelike processes may be observed in the plasma of the positive column at low gas pressure migrating from the cathode to the anode. Ionic oscillations may be observed only if anode oscillation is absent. The following problems are discussed here: 1) Does a low limit of pressure exist where no anode zone is present? 2) Does any form of wavelike processes exist in columns without anode zone? If at all, of what kind is their characteristics? The experimental arrangement is shortly described to determine the oscillations by means of a photoelectronic multiplier and an oscilloscope. It was found that the anode zone in helium disappears spontaneously at a pressure of below 0.9 torr and

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Waves of Charge Density Oscillations in a Cylindrical Plasma

30V/46-23-6-13/25

at currents of less than 60-120 ma. The dependence of the brightness oscillation amplitudes in the positive column on the frequency may mean the presence of a resonance frequency (Fig 1). Table 1 shows the length and resonance of the zones and, by calculation from them, the propagation velocities of the anode zone in helium at different pressures and for different tube diameters. It was found that for defined conditions in helium (0.01 torr) the positive zone expands throughout the tube, and wave processes may be observed which migrate from the cathode to the anode. The results of measurement summarized in table 2 show that frequency enlarging diminishes the length of the cathode zone. The temperature of $205 \cdot 10^3$ °K in helium at a pressure of 0.01 torr and a current of 30 ma was determined by means of a Langmuir search electrode. On the basis of these data the velocity of waves was calculated. Finally, similar experiments on argon and xenon are described with the disappearance of the anode zone at pressures of $3-4 \cdot 10^{-3}$ torr. The temperature amounted to $84 \cdot 10^3$ °K under the above conditions. There are 1 figure, 2 tables, and 6 ref-

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Waves of Charge Density Oscillations in a Cylindrical Plasma

SOV/48-23-9-13/25

ferences, 2 of which are Soviet.

ASSOCIATION: Moskovskiy gos. universitet im. M. V. Lomonosova, Fizicheskiy
Fakul'tet (Moscow State University imeni M. V. Lomonosov,
Department of Physics)

Card 3/3

21(7)

AUTHORS:

Zaytsev, A. A., Vasil'yeva, M. Ya.,
Inev, V. K.

SOV/56-36-5-58/76

TITLE:

On a Possibility of Determining the Potential in the Plasma Space From the Characteristic of Noises Occurring in a Gas Discharge (O vozmozhnosti opredeleniya potentsiala prostranstva plazmy po karakteristikam shumov, vzbuzhdayemykh v gazovom razryade)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 36, Nr 5, pp 1590-1591 (USSR)

ABSTRACT:

As the usual probe-method by means of which potential determinations in the plasma are carried out is connected with numerous difficulties, the authors of the present "Letter to the Editor" suggest that the noises occurring in a gas discharge be recorded and that conclusions be drawn from their characteristic as to the course of the potential. In gas-filled tubes with a glow cathode noises with amplitudes of up to 1 v occur with discharges in wide frequency ranges (kilo-megacycles). The authors carried out noise measurements in the probe-cathode range in cylindrical tubes with oxide cathode by using the noise meter IP-12M.

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On a Possibility of Determining the Potential in the Plasma Space From the Characteristic of Noises Occurring in a Gas Discharge SOV/56-36-5-58/76

As filling gas krypton was used within the pressure range of from 0.01 to 1 torr; the discharge currents were between 6 and 140 ma. Figure 1 shows a typical probe characteristic and the corresponding noise curves, figure 2 shows potential distribution along the discharge axis determined by the usual as well as by the "noise" method. There is good agreement between the curves. There are 2 figures and 4 references.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: January 14, 1959

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24(3), 9(3)

SOV/20-127-1-16/65

AUTHORS: Zaytsev, A. A., Vasil'yeva, M. Ya.

TITLE: The Investigation of the Formation of Mobile Layers by the Method of Perturbations (Issledovaniye formirovaniya podvizhnykh sloyev metodom vozmushcheniy)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 1, pp 63-66 (USSR)

ABSTRACT: For the investigation mentioned in the title the positive column in the transition state from the homogeneous to the layer-like shape must be investigated. In a previous paper by A. A. Zaytsev (Ref 1) it was shown that by the superposition of oscillation from without over the steady discharge (which, in the case of a lacking foreign interference, is characterized by a homogeneous positive column), artificially mobile layers can be caused and maintained. This is, however, possible only if the positive column, due to the peculiarities of the processes taking place in it, has a tendency to fray out. The mobile layers may be formed by a single perturbation of the discharge state, but in that case the layers formed immediately become blurred and vanish, so that the positive column immediately returns to the original (i.e. homogeneous)

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SOV/20-127-1-16/65
The Investigation of the Formation of Mobile Layers by the Method of Perturbations

shape as time progresses. It is upon this fact that the investigation method employed in this paper is based, for the authors use the method of pulse perturbations. The tension pulses (of rectangular shape with a width of 1 μ sec and a frequency of 50 sec^{-1}) are transmitted either on to a cylindrical probe or on to a metal ring (which may be differently orientated with respect to the cathode). The transition processes in the positive column were investigated by means of a photoelectronic multiplier and a cathode oscillograph with "waiting development". Experimental difficulties are briefly mentioned. In helium and at pressures of 1 torr the positive column is of homogeneous shape in the range of low amperages. Below the critical amperage of 110 ma the positive column has oscillations of the brightness of luminescence with decreasing amplitude as a result of pulse perturbations. The degree of oscillation damping depends on amperage. The more amperage differs from critical amperage, the stronger damping will be. At an amperage of more than 6 ma, the oscillation amplitude no longer decreases to zero

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SOV/20-127-1-16/65

The Investigation of the Formation of Mobile Layers by the Method of Perturbations

in the intervals of time between the successive pulses. In the state which is a near approach to the threshold of the spontaneous occurrence of mobile layers, oscillations are damped only very slowly, so that, under these conditions, seconds are necessary for the oscillations to vanish. The attached figures show various oscillograms. Immediately connected with the motion of the layers, is an oscillation of the anode fall with the frequency of the mobile layers. Therefore, a current oscillation in the discharge circuit always occurs whenever the positive column contains mobile layers. The action upon the cathode range is not the basic condition necessary for the artificial excitation of the layer-like state. Experiments show that layers are formed if pulses are applied to the probe which is at a sufficiently large distance from the cathode. This is always brought about in such a manner that the layer-like shape of the column forms with some delay towards the side of the anode. In all cases the velocity of the "stratification wave" was greater than the velocity of the motion of layers. The

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SOV/20-127-1-16/65
The Investigation of the Formation of Mobile Layers by the Method of
Perturbations

"stratification wave" decreases in the order He, Ne+Hg,
Ar+Hg. There are 2 figures, 1 table, and 3 Soviet references.

ASSOCIATION: Moskovskiy gosudarstvennyy universiteta im. M. V. Lomonosova
(Moscow State University imeni M. V. Lomonosov)

PRESENTED: March 12, 1959, by M. A. Leontovich, Academician

SUBMITTED: March 11, 1959

Card 4/4

83609

S/056/60/038/005/042/050
B006/B063

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26.2311

AUTHORS: Zaytsev, A. A., Vasil'yeva, M. Ya.

TITLE: The Relationship Between the Vibrations and the Rate of
Loss of Charged Particles in a Cylindrical Low-pressure
Plasma Placed in a Longitudinal Magnetic Field η .

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960,
Vol. 38, No. 5, pp. 1639 - 1640

TEXT: The principal purpose of the present work was to investigate the
plasma oscillations of a positive column placed in a constant longitu-
dinal magnetic field. Besides, the authors studied the effect of this
field upon the electric field strength along the column and the diffu-
sion current on the walls of the discharge tube. The latter had an in-
ternal diameter of 2 cm, an electrode spacing of 90 cm, and was filled
with He (0.2 - 0.05 torr). The plate current could be varied between
50 and 350 ma. The gas had an ionization degree of 0.1%. The discharge
tube was placed in a solenoid in such a manner that the ends carrying
the cathode and the anode projected by 25 and 15 cm, respectively. The

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The Relationship Between the Vibrations and the Rate of Loss of Charged Particles in a Cylindrical Low-pressure Plasma Placed in a Longitudinal Magnetic Field S/056/60/038/005/042/050 B006/B063

magnetic field strength varied from 0 to 2.5 koe. Without a magnetic field, the discharge had a noise of 10³ - 10⁶ cps. The magnetic field increased the noise and affected its spectrum. A critical field strength gave rise to sudden oscillations whose intensity was 10 to 15 times higher than that of the noise level. The pulse height of these oscillations at the electrodes reaches 7 - 10 v. This critical field strength is independent of the current but increases with pressure:

p	0.05	0.07	0.1	0.2 [torr]
H _{cr}	750	990	1400	1630 [oe] .

Simultaneously with the occurrence of the oscillations, the anode plate current abruptly drops by 5-8%. Fig. 1 shows the results of measurements of the effect of the field on the electric field strength, carried out by means of a probe. The results of measurement of the effect of the magnetic field upon the amperage on the chamber walls are given in Fig. 2. A few other details of the oscillations are discussed. The authors believe that the kind of oscillations observed and the increase

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83609

The Relationship Between the Vibrations and the Rate of Loss of Charged Particles in a Cylindrical Low-pressure Plasma Placed in a Longitudinal Magnetic Field S/056/60/038/005/042/050 B006/B063

of the effective rate of the loss of charged particles due to diffusion are caused by a macroscopic displacement of the plasma filament within the magnetic field. There are 2 figures and 4 references: 1 Soviet, 1 US, and 1 British.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: January 21, 1960

X

Card 3/3

35482
S/109/62/007/003/025/029
D256/D302

262311

AUTHORS: Zaytsev, A.A., and Vasil'yeva, M.Ya.

TITLE: Striated positive column of gas discharge in a longitudinal magnetic field

PERIODICAL: Radiotekhnika i elektronika, v. 7, no. 3, 1962,
557 - 565

TEXT: The study was conducted in order to examine the diffusion to the walls in the process of decrease of the number of charged particles in the plasma. If the mechanism of appearance of striations was controlled by the process of diffusion one would expect to observe changes in the velocity of moving striations of the positive column and in the character of the stationary striations under application of the longitudinal magnetic field. The following measurements were performed: 1) The velocity of the striation 'wave' in the position column of helium discharge; 2) The length of stationary striations in hydrogen; 3) The length and the frequency of non-stationary striations in helium and in a mixture of argon

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Striated positive column of gas ...

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with mercury vapor. The experimental method was that described previously. In addition the discharge tube was placed in the magnetic field of a solenoid coil and light from the local region under investigation was directed on to a photoelectron-multiplier tube and recorded. The magnetic field was varied up to 1200 Gauss, and the pressure from 0.4 to 1 mm Hg. Pulses of 0.2 μ sec duration were applied between a ring round the tube and the cathode at a repetition rate of 50 l/sec in order to attain transition from a uniform helium column to a striated one. The presented results reveal a dependence of the pattern of the striated discharge upon the magnetic field applied; it was found that the magnetic field increases the length of the striations decreasing their frequency and velocity. The results are shown to be in agreement with the prediction of an approximate calculation expressing the length of the striations in terms of diffusion. There are 6 figures, 3 tables and 19 references: 8 Soviet-bloc and 11 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: H. Rother, Ann. Phys. 1959, 4, 7, 373; K. Wojaczek, Ann. Phys., 1958, 2, 1, 2, 68; R. Bickerton and A. Engel, Proc. Phys. Soc. B, 1956,

Card 2/3

Striated positive column of gas ... S/109/62/007/003/025/029
D256/D302

69, 4,468; A. Stewart, J. Appl. Phys., 1956, 27, 8, 911.

ASSOCIATION: Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo
universiteta im. M.V. Lomonosova, kafedra elektroniki
(Faculty of Physics of the Moscow State University im.
M.V. Lomonosov, Department of Electronics)

SUBMITTED: July 14, 1961

Card 3/3

L 38300-66 EMT(1)

SOURCE CODE: UR/0109/66/011/005/0966/0967

ACC NR: AP6029724

AUTHOR: Zernov, D. V.; Timofeyev, P. V.; Fursov, V. S.; Migulin, V. V.; Spiyak, G. V.;
Spasskiy, B. I.; Nilender, R. A.; Grozdover, S. D.; Shemayev, A. M.; Solntsev, G. S.;
Kuzovnikov, A. A.; Zaytsev, A. A.; Vasil'yeva, M. Ya.; Mitsuk, V. Ye.; Dubinina,
Ye. M.; Zheludaya, G. A.

ORG: none

TITLE: Nikolay Aleksandrovich Kaptsov

SOURCE: Radiotekhnika i elektronika, v. 11, no. 5, 1966, 966-967

TOPIC TAGS: electric engineering personnel, magnetron, klystron, corona discharge, gas conduction, gas discharge plasma

ABSTRACT: N. A. Kaptsov passed away 10 February 1966. He was a student of the famous P. N. Lebedev, and performed many fundamental investigations in the development of modern electronics. He was the creator and leader of the chair of electronics of Moscow State University. He developed the concept of phase grouping of electrons. His ideas are the basis for the development of the magnetron and klystron. He developed the concept explaining the phenomenon of corona discharge. He also developed ideas connected with formation of gas conduction and phenomena in a gaseous-discharge plasma. Kaptsov served for years as the head of the physical laboratory and consultant to the Moscow Electron Tube Plant. He was the author of numerous books, including "Physical Phenomena in Vacuum and in Gases, which was translated into foreign languages; he also created and taught numerous electronics courses. [JPRS: 36,501]

SUB CODE: 05, 09 / SUBM DATE: none

Card 1/1/11LP

0718 0203

ACC NR: AP6002283

SOURCE CODE: UR/0188/65/000/006/0003/0012

AUTHOR: Vasil'yeva, M. Ya.; Zaytsev, A. A.; Miskinova, N. A.

ORG: Department of Electronics, Moscow State University (Kafedra elektroniki Moskovskogo universiteta)

TITLE: Effect of a readily ionizing gaseous admixture on mobile strata in inert gases and separation of helium-hydrogen and neon-hydrogen mixtures

SOURCE: Moscow. Universitet. Vestnik, Seriya III. Fizika, astronomiya, no. 6, 1965, 3-12

TOPIC TAGS: gas mechanics, gas kinetics, gas flow, inert gas, ionized gas, helium, neon, argon, hydrogen

ABSTRACT: In order to study the effects of hydrogen admixtures on the existence of moving strata in Ne, He, and Ar, and in binary mixtures of inert gases (He-Ar, He-Kr, He-Ne, and Ne-Kr), the authors conducted these investigations, taking into consideration the fact that such studies are complicated by the separation of the mixture components. This required additional studies of the time and rate of the establishment of a stationary state of separation in Ne-H₂ and He-H₂ compounds, characterized by the equilibrium between the direction of motion of ions of the readily ionizing component toward the cathode and the diffusion which counteracts separation. The investigations were conducted with spectrally pure Ne, He, Kr, and Ar in sealed tubes with an

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UDC: 537.56: 533.27

ACC NR: AP6002283

indirect heating oxide cathode, and a conical anode. The length of the tubes was 60 cm and the diameter varied from 8 to 28 mm. A hydrogen generator, consisting of a nickel cylinder filled with titanium hydride sponge, saturated with purified hydrogen, supplied the necessary hydrogen. The pressure of the hydrogen reached 1.5 mm Hg. The moving strata were observed by means of a rotating mirror and a photomultiplier, whose signal was fed into an IO-4 oscillograph. A stabilized rectifier, supplied up to 1.2 ampere of discharge current to the tube. The pressure of the basic gas during the measurements was 1-21 mm Hg. The results showed that moving strata exist in pure inert gas up to the upper boundary current. The magnitude of this current drops as the pressure increases, except in Ne where at a pressure of 14 mm Hg the current reaches 500 ma. By adding H₂ the area of the homogeneous column expands toward the anode and a further addition of hydrogen makes the column completely homogeneous. All this is related to the separation of the Ne-H₂ system. The authors conclude that the addition of hydrogen to helium, neon, and argon eliminates the moving strata. 2-4% of readily ionizing admixture is most effective for inhibiting strata in binary mixtures of inert gases. Orig. art. has: 5 figures and 7 tables,

SUB CODE: 07 / SUBM DATE: 02Jun64/ ORIG REF: 006/ OTH REF: 004

Card 2/2

SHVILKIN, B.N.; VASIL'YEVA, M.Ya.; ZATISEV, A.A.

Plasma noise of a high-frequency discharge in a cylindrical tube.
Izv. vys. ucheb. zav.; radiofiz. 7 no.5:244-247, 1964.

(Sov. Phys.)

1. Moskovskiy gosudarstvennyy universitet.

YERMOLAYEVA, Ye.A.; KOZLOVA, N.A.; BATSKA, P.; SHILOVA, M.A.; VASIL'YEVA,
M.Ye.

Effect of maleic hydrazide on photosynthesis and carbohydrate
metabolism in plants. Trudy Bot. inst. Ser. 4 no.15:120-131
'62. (MIRA 15:7)
(Photosynthesis) (Growth promoting substances) (Pyridazinedione)

BERNSHTEYN, M. Kh.; YABKO, Ya.M.; ZAYONCHKOVSKIY, A.D.; VISHNEVSKAYA, M.D.;
LEV, M.V.; SIRIS, A.L.; KOCHETKOVA, I.V.; VASIL'YEVA, M. Ye.

Toe-puffs made from thermosetting and thermoplastic polymers.
Kozh.-obuv. prom. 7 no. 10:18-22 0 '65 (MIRA 19:1)

VASIL'YEVA, M.Ya.; ZAYTSEV, A.A.; MISKINOVA, N.A.

Effect of a readily ionizable impurity on mobile striations in inert gases and the separation of mixtures of helium and neon with hydrogen. Vest. Mosk. un. Ser. 3: Fiz., astron. 20 no.6: 3-12 N-D '65. (MIRA 19:1)

1. Kafedra elektroniki Moskovskogo universiteta. Submitted June 2, 1964.

VASIL'YEVA, N.

Efficiency promoters exchange practices. Pozh.delo 9 no.12:22-23
D '63. (MIRA 17:1)

VASIL'YEVA, N., instruktor-letchik

Taking past errors into account. Kryl.rod. 12 no.6:25 Je '61.
(MIRA 14:6)

(Airplanes--Piloting)

VASIL'YEVA, N.

Advanced training for personnel working in children's homes.
Med. nestra 17 no. 8:29-34 Ag '58 (MIRA 11:8)
(ORPHANS AND ORPHANAGES)

KOZACHENKO, I.; VASIL'YEVA, N.

Good friendship. Prof.-tekh. obr. 21 no.9:32 S '64.

(MIRA 17:11)

1. Direktor gorodskogo professional'no-tekhnicheskogo uchilishcha No.4 g. Rostova-na-Donu (for Kozachenko). 2. Pomoshchnik direktora gorodskogo professional'no-tekhnicheskogo uchilishcha No.4 g. Rostova-na-Donu (for Vasil'yeva).

~~VASIL'YEVA, N.~~

I.I. Shishkin; 1832-1898. N.Vasil'eva. Rab.1 stal.33 no.1:23 Ja
'57. (MLRA 10:2)

(Shishkin, Ivan Ivanovich, 1832-1898)

VASIL'YEVA, N.

Always with the people; on the 80th anniversary of TSiotka's
birth. Rab. i sial. 32 no.7:16-17 J1 '56. (MLRA 9:8)
(Pashkevich, Aloiza, 1876-1916)

VASIL'YEVA, N.

"On the roads of Rumania" by Z.Khiren. Reviewed by N.Vasil'eva.
Sov.voin 38 no.17:14 S '56. (MLRA 10:1)
(Rumania--History)

VASIL'YNA, M.

A great and useful friendship. *Sov. profsoyuz* 5 no.1:34-35 Ja '57.
(MLBA 10:2)

1. Khudoshnik-model'yer fabriki "Skorekhod."
(Czechoslovakia--Shoe industry)

VASIL'YEVA, N.

These are our worries. Pozh.delo 8 no.2:3-5 F '62.
(Fire extinction—Societies)

(MIRA 15:2)

VASIL'YEVA, N.

Conference of readers of the journal "Plasticheskie massy."
Plast. massy no.11:76 '62. (MIRA 16:1)

(Plastics--Periodicals)

VASIL'YEVA, N.; KAZ'MIN, N.; UL'YANOV, V.

Resolutions of Women's Councils. Pozh.delo 8 no.3:6-7 Mr '62.
(MIRA 15:4)
(Tambov Province—Women in public life) (Fire prevention)

BOJARCZENKO, Michal [Boyarchenko, Mikhail] (Moskwa); WASILEWA, Natalia
[Vasil'yeva, Nataliya] (Moskwa)

High-speed magnetic amplifiers. Archiw automat 4 no.3/4: 243-252
'59. (EEAI 9:7)
(Magnetic amplifiers)

СИСАКИАН, Н. П., КОПЯКОВА, А. П., and ВАСИЛИЙЕВА, Н. А.

"Daily Periodicity of Adsorptive Capacity in Plants and Its Connection with the Fermentative Synthesis of Sucrose," Dok. AN, 57, No. 5, 1947

VASILEV, D.

... were obtained for ...
... of KNOL 10 ROL and for the second at -11.4° and

VASIL'YEVA, N. A., and MOROZOV, N. S.

"Paleogene Deposits of the Basin of the Bogucharka and Tikhaya Rivers on the Don's Right Bank of the Central Current"
Uch. Zap. Saratovskogo Gos. Un-ta, Vyp. Geol., 1953, 37, 21-25

The author shows that in the region of the right bank of the middle flow of the River Don lie transgressively paleogene deposits upon deposits of the Upper Cretaceous (up to the Senoman inclusively). The age of the deposits is determined according to their stratigraphic position and from their analogy with the quartz-plauconite sands of the Oligocene of the Ukraine. (RZhGeol, No 3, 1954)

SO: W-31187, 8 Mar 55

VASIL'YEVA, N.A.

The role of hypnotic sleep in the compound treatment of bronchial
asthma. Sov.med. 21 no.5:98-99 My '57. (MLRA 10:?)

1. Is propedevticheskoy terapevticheskoy kliniki (zav. - prof.
TS.A.Levina) Odesskogo meditsinskogo instituta imeni N.I.Pirogova
(dir. - prof. I.Ya.Deyneka)

(ASTHMA, ther.

hypnosis)

(HYPNOSIS, ther. use

asthma)

~~VASIL'YEVA, N.A.~~

Skin reactions in bronchial asthma under compound therapy
including hypnotic sleep. Vrach.delo supplement '57:28 (MIRA 11:3)

1. Kafedra propedevtiki vnutrennikh bolezney (zav.-prof. TS.A.
Levine) Odesskogo meditsinskogo instituta.
(SKIN--INNERVATION) (ASTHMA) (SLEEP--THERAPEUTIC USE)

VASILYEVA, N. A., MAYDEBOR, V. N., SOKOLOVSKIY, O. V., SHANGIN, N. M., ALEKSEYEV, F. A.,
GOLBEK, G. R., SEYFER, V. N. (USSR)

"Tritium in Underground Water Studies."

report presented at the Conference on Radioisotopes in Metallurgy and Solid State
Physics, IAEA, Copenhagen, 6-17 Sept 1960.

VASIL'YEVA, N.A.; SOKOLOVSKIY, E.V.; MAYDEBOR, V.N.

Using tritium for studying the flow of injected water. Geol.
nefti i gaza 4 no.7:55-59 Je '60. (MIRA 13:8)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut.
(Hydrogen--Isotopes)

VASIL'YEVA, N.A., Cand Med Sci -- (diss) "Application
of suggested sleep by means of hypnosis⁶ in the complex
~~of~~ therapy of bronchial asthma." Odessa, 1958, 1⁷ pp
(Odessa Med Inst im N.I. Pirogov) 200 copies
(KL, 23-58, 111)

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LEVINA, TS.A., prof., GRUZINA, Ye.A., dots., VASIL'YEVA, N.A., ROMANOVSKAYA, A.I.,
YAGODKINA, N.I., PAYLOVA, O.V.

Treating stenocardia with nitranol. Sov.med. 22 no.8:119-126 Ag '58
(MIR: 11:10)

1. Iz propedevticheskoy terapevticheskoy kliniki (zav. r prof.
TS.A. Levina) Odesskogo meditsinskogo instituta imeni N.I. Pirogova
(dir. prof. I.Ya. Deyneka).

(ANGINA, PECTORIS, ther.

aminotrate (Rus))

(NITRITES, ther. use

aminotrate in angina pectoris (Rus))

VASIL-YEVA, N. A., GOFSHTEYN, L. V.

Method for isolating cell nuclei from embryos and seedlings
of wheat in glycerol solutions Dokl. AN SSSR 157 no. 3 696-698
JI 1964 (MIRA 17.7)

1. Institut biokhimiya imeni A.N. Bakha AN SSSR, Predstavleno
akademikom N.M. Slavkyanov.

17

Translocation of moisture in the bulk of stored grain
5 A. Kizel, N. Vasil'eva and G. Tsygankova. *Compt. rend. acad. sci. U. R. S. S. 24, 790 (1959)* (in English).
— Seeds of a soft variety of spring wheat were immersed in water on a strainer and allowed to dry on a thick cushion of gauze and thoroughly dried in thermostats at 28.3° in layers 4-8 cm. thick. The expt. was conducted in 6-l. flasks insulated with felt and oil cloth and provided with wooden lids. A little refrigerator was designed to pass through the lid and cool the grain locally. The lid was pierced by a thermometer. The cooled portion of the grain was isolated in a gauze bag impregnated with paraffin. The bag was filled with about 60 g. of the same grain contained in the vessel. The refrigerator was a short cylindrical glass vessel of about 20-25 cc. capacity with 1 inlet and 1 outlet tube sealed in and insulated from the rest of the grain by a double-glass mull closed hermetically. The figures obtained show that grain gives off water to its cooled portions. Small differences in temp. suffice to bring about such translocation even in cases where the water content of the grain is extremely low. The importance of this fact for grain storage is pointed out and also the necessity of a uniform temp. throughout its vol.
A. H. Krappé

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

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ALPHABETIC INDEX

COMMON INDEX

COMMON INDEX

1ST AND 2ND GROUPS

PROCESSES AND PROPERTIES INDEX

11-D

CA

Causes of rhythmic changes in enzymic processes of plants. N. M. Susakyan, N. A. Yasil'eva, and A. M. Kobyakova (Bach Biochem. Inst., Moscow). *Biochimiya* 10, 445-54(1945)(English summary).—The synthesis and hydrolysis of sucrose were studied in the leaves of the sugar beet grown in absolute darkness and under the natural conditions of diurnal changes of illumination. A rhythm is developed even in the dark, the causes of which are not yet clear. The periodicity of enzymic changes expresses the changes of the physiol. state of the plant.

H. Priestley

COMMON ELEMENTS

MATERIAL NOTES

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND GROUPS

1ST AND 2ND GROUPS

1ST AND 2ND GROUPS

CA

11 D

The role of amino acids in the synthesis of sucrose in plants. N. M. Siskyan and N. A. Vasil'eva (Bach Biochem. Inst., Acad. Sci., Moscow). *Biofizika* 12, 241-9(1947).—The leaves of wheat, pea, and sugar beet were tested for the degree of sucrose synthesis by vacuum infiltration of the amino acid together with solns. of invert sugar and sucrose. The following substances activated sucrose synthesis when present in small amts., but were inhibitors in large concns.: glycine, alanine, glutamic acid, asparagine, and tryptophan. Aspartic acid and phenylalanine had an inhibiting effect. The amino acids act by stimulating the protoplasm and by altering its adsorptive properties; this shifts the enzymic equil.

H. Priestley

VASIL'YEVA, N. A.

USSR/Chemistry - Sucrose
Chemistry - Sugar Beets

Aug 1947

"Daily Periodicity of the Absorption Ability in Plants and Its Relation to the Fermentative Synthesis of Sucroses," N. M. Sisakyan, A. M. Kobyakova, N. A. Vasil'yeva, Inst Biochem imeni A. N. Bakh, Acad Sci USSR, 1 $\frac{1}{2}$ pp

"Dok Akad Nauk SSSR, Novaya Seriya" Vol LVII, No 5

Describes experiments which lead to conclusion that roots of sugar beet possess capacity for intensive formation of sucrose after free invertase in them has been absorbed. Submitted by Academician A. I. Oparin, 20 Jan 1947.

PA 58T10

VASIL'YEVA, N. A.

37429. SISAKYAN, N. M., GLUSHCH ENKO, I. E. i VASIL'YEVA, N. A. Nasledovaniye priobretennykh biokhimicheskikh priznakov v semennykh potomstvakh vegetativnykh givridov [Plodovykh]. Problemy biokhimi v michurinskoy biologii, sb, 1, 1949, s. 9-48. --Bibliogr: 29 nazv.

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949

VASIL'EVA, N. A.

37402. SISAKYAN, N. M.; KARAJET^PYAN, V. K. ; i VASIL'EVA, N. A. Fermentativnaya Aktivnost' Nasledstvenno Tverdyykh Pshenits, izmenennykh v Nasledstvenno Mya kkiye Pshenitsy. Problemy Biokhimii v Michurinskoy Biologii, Sb. 1, 1949, s. 92-101.

SO: Letopis' Zhurnal'nykh Statey, Vol. 7, 1949

CA

11D

Nature of amino acid action on the synthesis of sucrose in the living plant cell. N. M. Shaakyan, N. A. Vasil'eva, and T. V. Stepanova (Bakh Biochem. Inst., Moscow). *Biokhimiya* 15, 394-400(1950); cf. *C.A.* 41, 6033c.— Leaves of 7-day-old wheat seedlings were vacuum infiltrated by the amino acid and invert sugar. The following amino acids activated the synthesis of sucrose: glycine, β -alanine, tryptophan, cysteine, and glutamic acid. Sucrose synthesis was retarded by serine, cystine, α -phenylalanine, histidine, methionine, aspartic acid, and arginine. The following amino acids were without effect on sucrose synthesis: valine, leucine, norleucine, isoleucine, and lysine. Those amino acids which increased sucrose synthesis also increased the adsorption of invertase by the plant tissue and raised the intensity of plant respiration. Amino acids which inhibited sucrose synthesis decreased invertase adsorption and were without effect on the plant respiration. Other substances besides amino acids were also tested for their action on respiration and sucrose synthesis. Extremely small amounts of thiamine increased respiration by 25%, and synthesis by 75%. Such an inhibitor of respiration as KCN was without effect on the retardation of sucrose synthesis. Na diethylthiourea, the specific inhibitor of polyphenoloxidase activity, was also without effect on the inhibition of sucrose synthesis. AgNO₃, the inhibitor of flavoprotein enzyme systems, completely checked the synthesis of sucrose. H. P.

VASIL'YEVA, I. I.

reject

Chem

③

Chemical Abstracts
Vol. 48 No. 5
Mar. 10, 1954
Biological Chemistry

The nature of the action of amino acids on sucrose synthesis in the living plant cell. N. M. Sisakyan, N. A. Vasil'eva, and T. V. Stepanova (Acad. Sci. U.S.S.R., Moscow). *Ukrain. Biokhim Zhur.*, 2, 471-80(1950)(in Russian); cf. *C.A.* 45, 1062d.—In the leaf blades of 7-day-old germinated wheat, enzymic sucrose formation and the adsorbability of invertase were detd. by the method of Kusanov (*C.A.* 41, 601A), and respiration was studied in a Warburg app. For study of enzymic synthesis the amino acids were simultaneously introduced with invert sugar soln. by vacuum infiltration into the plant tissues. For study of their action upon adsorption or respiration, an aq. solution of the amino acids was introduced by vacuum infiltration. Sucrose synthesis is activated by glycine, alanine, L- and DL-tryptophan, L-cysteine, DL- α -glutamic acid; it is inhibited by DL-serine, L-cystine, DL-phenylalanine, DL-histidine, DL-methionine, DL-aspartic acid, and DL-arginine; no effect upon sucrose synthesis is shown by DL-valine, L- and DL-leucine, DL-norleucine, DL-isoleucine and DL-lysine. The introduction of amino acids into plant tissues incites complementary respiration, which serves as a source of indispensable energy for synthetic reactions and for adsorption of enzymes. The adsorption of enzymes, e.g. invertase, leads to addnl. enzymic sucrose formation as the result of removal of hydrolyzing agents from the medium. Thiamine increases respiration by 25% and sucrose synthesis by 75%; KCN (a respiration inhibitor) and compds. of heavy metals (depressors of the respiratory system), and sodium diethylthiourea (which inhibits polyphenoloxidase) do not depress synthesis of sucrose; AgNO₃ (an inhibitor for the flavoprotein enzyme systems) completely inhibits O₂ absorption, greatly depresses respiration, and completely inhibits sucrose synthesis. Clayton F. Holoway

110

CA

Some metabolic properties of ramosse wheats. N. M. Sisakyan, N. Vasil'eva, and A. Minina. *Zhurn. Obshch. Biol. (J. Gen. Biol.)* 12, 73-83(1951).—Ramosse wheats differ from common varieties in earlier synthesis of sucrose and starch, lower hydrolysis ratio, and lower content of sol. sugars. 18 references. Julian P. Smith

VASIL'YEVA, N. A.

VASIL'YEVA, N. A. -- "The Character of the Modification of the Biochemical Properties of Seed Generations of Vegetative Tomato Hybrids." Sub 24 Apr 52, Inst of Biochemistry imeni A. N. Bakh, Acad Sci USSR. (Dissertation for the Degree of Candidate in Biological Sciences).

SO: Vechernaya Moskva January-December 1952

VALE YAVA W A

USSR

Oxidation-reduction processes in hard and soft wheat
 N. M. Sinyan and N. A. Vasil'eva (A. N. Bakh Inst.
 Biochem., Acad. Sci. U.S.S.R., Moscow). *Bio khimiya* 10,
 730-7(1964).—Respiration and oxidation-reduction proc-
 esses are enhanced in hard and soft wheat in the germina-
 tion stage, the levels of their intensity being higher in the
 germs than in the endosperms. In the first 24 hrs. of ger-
 mination the germ plays the most important role in the trans-
 port of H. After 24 hrs. the part played by the endosperm
 in the process of dehydrogenation becomes considerable
 in ensiled. Different types of dehydrogenase are found in
 both the germ and the endosperm. Glucose and malate
 dehydrogenases are most active in the germ and glutamate
 succinic dehydrogenases in the endosperm. During the first
 3 days of germination soft wheat displays a marked increase
 in the activity of these enzymes.

and oxidase, polyphosphate oxidase, and peroxidase in the
 hard wheat during the first 24 hrs. after germination with
 increasing activity in the germ.

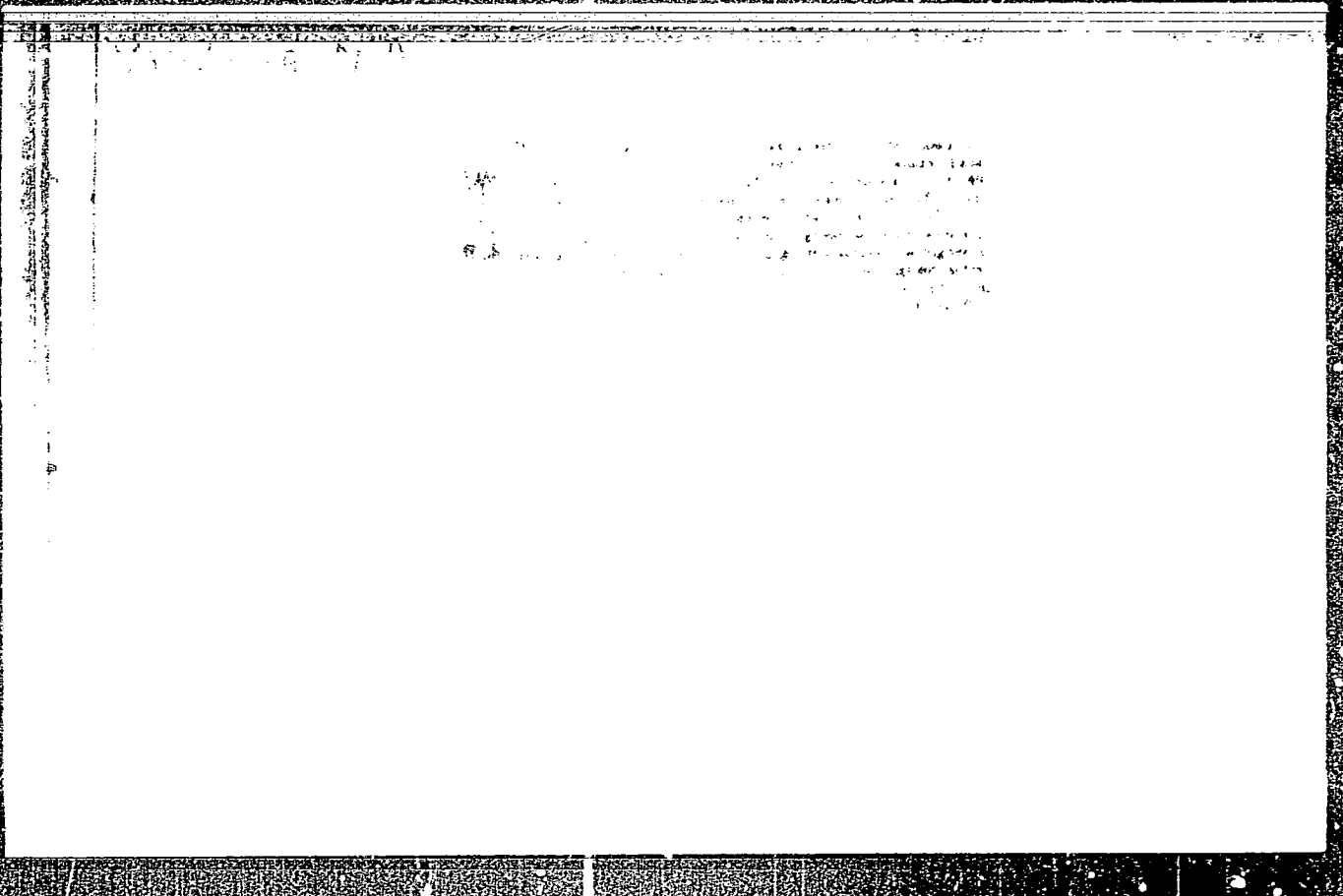
sucrose and sucrose-6-phosphate phosphatase.

VASIL'Yeva, N.A.

SISAKYAN, N.M.; VASIL'Yeva, N.A.; SPIRIDONOVA, G.I.

Isolating nuclei from plant cells and studying their biochemical properties [with summary in English]. *Biokhimiia* 22 no.5:813-824
S-O '57. (MIRA 11:1)

1. Institut biokhimiia im. A.N.Bakha, Akademii nauk SSSR, Moskva
(CELL NUCLEUS,
isolation from plant cells & biochem. (Rus))



- 6. Investigation and utilization of natural substances capable of the action of hormones. **I. I. KUMAR** and **G. N. SINGH**, **Indian Academy of Sciences, Mysore**
- 7. Investigation of the mechanism of an adhesive water-soluble polymer under the conditions of an adhesive under conditions. **I. I. KUMAR**, **A. S. Bhatnagar**, **Indian Academy of Sciences, Mysore**
- 8. The role of catalytic enzymes in the ripening and storage of fruits. **S. A. MISHA**, **A. S. Bhatnagar**, **Indian Academy of Sciences, Mysore**
- 9. Examination of natural auxinoids on the environmental conditions. **M. I. BUKHARIN**, **Academy of Sciences USSR, Moscow**
- 10. Investigation of the effect of auxin on growth substances and their synthesis. **A. P. BUKHARIN** and **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
- 11. Inhibition of the action of auxin on the ripening of fruits. **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
- 12. The effect of auxin on the ripening of fruits and on the action of auxin on the ripening of fruits. **A. P. BUKHARIN** and **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
- 13. Hormonal regulation of plant cell metabolism. **I. I. KUMAR** and **I. I. BUKHARIN**, **Indian Academy of Sciences, Mysore**
- 14. Interrelationships between auxin and phytohormones. **A. P. BUKHARIN**, **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
- 15. Problems of auxin action in plants. **P. A. BUKHARIN**, **A. S. Bhatnagar**, **Indian Academy of Sciences, Mysore**
- 16. Auxin action problems. **V. I. KUMAR**, **Institute of Plant Industry, Leningrad, USSR**
- 17. Promoting effect of microorganisms on the resistance of plants to microbe conditions. **I. I. BUKHARIN**, **Academy of Sciences, USSR, Moscow**
- 18. Application of auxin derivatives as stimulants of plant growth. **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
- 19. Auxin action on the growth of physiological processes in plants. **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
- 20. Auxin action on the growth of physiological processes in plants. **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
- 21. Auxin action on the growth of physiological processes in plants. **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
- 22. Auxin action on the growth of physiological processes in plants. **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
- 23. Auxin action on the growth of physiological processes in plants. **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
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- 26. Auxin action on the growth of physiological processes in plants. **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
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- 28. Auxin action on the growth of physiological processes in plants. **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
- 29. Auxin action on the growth of physiological processes in plants. **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**
- 30. Auxin action on the growth of physiological processes in plants. **I. I. KUMAR**, **Indian Academy of Sciences, Mysore**

... ..

LITVINENKO, A.G., incl.; DYUNINA, V.G., mladshiy nauchnyy sotrudnik; VASIL'YEVA,
N.A., mladshiy nauchnyy sotrudnik

Use of new softeners in rubber compounding. Nauch.-issl. trudy
VNIIPIK no.13:20-27 '62. (MIRA 18:1)

VASIL'YEVA, N.A.

Pneumographic studies in disorders of coronary circulation
during nitranol therapy. *Khim. i med.* no.16:56-60 '61.
(MIRA 17:8)

VASIL'YEVA, N.A.; KONYUKHOV, B.V.

Genetic analysis and morphological description of a line of mice with anomalous extremities (short-leg mutation). Biul. eksp. biol. i med. 53 no.5:128-131 My '62. (MIRA 15:7)

1. Iz kabineta nasledstvennosti (zav. - kand. biologicheskikh nauk B.V. Konyukhov) Instituta eksperimental'noy biologii (dir. -- prof. I.N. Mayskiy) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR N.N. Zhukovym-Verezhnikovym.
(EXTREMITIES(ANATOMY)--ABNORMITIES AND DEFORMITIES)
(MICE) (ZOOLOGY--VARIATION)

VASIL'YEVA, N.A.

Stratigraphic position of "Belogradnya layers." Uch.zap.SGU
65:91-93 '59. (MIRA 16:1)
(Volga Valley--Geology, Stratigraphic)

VASIL'YEVA, N.A.

Conditions determining the Paleocene sedimentation on the right
bank of the Volga Valley portion of Saratov and Stalingrad
Provinces. Uch.zap. SGU 74:91-98 '60. (MIRA 15:7)
(Volga Valley--Geology, Stratigraphic)

VASILYEVA N.A., GOFSHTEYN L.V., KOPYAKOVA A.M. (USSR)

"The Participation of the Nucleus in Plant Cell Metabolism."

Report presented at the 5th Int'l Biochemistry Congress,
Moscow, 10-16 Aug. 1961

VASILYEV, N A

PHASE I BOOK EXPLOITATION SOV/5592

Vsesoyuznoye soveshchaniye po vnedreniyu radioaktivnykh izotopov i yadernykh izlucheniy v narodnom khozyaystve SSSR. Riga, 1960.

Radioaktivnyye izotopy i yadernyye izlucheniya v narodnom khozyaystve SSSR; trudy Vsesoyuznogo soveshchaniya 12 - 16 aprelya 1960 g. G. Riga, v 4 tomakh. t. 4: Poiski, razvedka i razrabotka poleznykh iskopayemykh (Radioactive Isotopes and Nuclear Radiation in the National Economy of the USSR; Transactions on the Symposium Held in Riga, April 12 - 16, 1960; in 4 volumes. v. 4: Prospecting, Surveying, and Mining of Mineral Deposits) Moscow, Gostoptekhizdat, 1961. 284 p. 3,640 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskyy komitet Soveta Ministrov SSSR. Gosudarstvennyy komitet Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii

Eds. (Title page): N. A. Petrov, L. I. Petrenko, and P. S. Savitskiy; ed. of this volume: M. A. Speranskiy; Scientific ed.: M. A. Speranskiy; Executive Eds.: N. N. Kuz'mina and A. G. Ionel';

Card 1/11

Radioactive Isotopes and Nuclear (Cont.)

SOV/5592

Tech. Ed.: A. S. Polosina.

PURPOSE : The book is intended for engineers and technicians dealing with the problems involved in the application of radioactive isotopes and nuclear radiation.

COVERAGE: This collection of 39 articles is Vol. 4 of the Transactions of the All-Union Conference of the Introduction of Radioactive Isotopes and Nuclear Reactions in the National Economy of the USSR. The Conference was called by the Gosudarstvennyy nauchno-tekhnicheskiy komitet Sovet Ministrov SSSR (State Scientific-Technical Committee of the Council of Ministers of the USSR), Academy of Sciences USSR, Gosplan SSSR (State Planning Committee of the Council of Ministers of the USSR), Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu (State Committee of the Council of Ministers of the USSR for Automation and Machine Building), and the Council of Ministers of the Latvian SSR. The reports summarized in this publication deal with the advantages, prospects, and

Card 2/11

Radioactive Isotopes and Nuclear (Cont.)

SOV/5592

development of radioactive methods used in prospecting, surveying, and mining of ores. Individual reports present the results of the latest scientific research on the development and improvement of the theory, methodology, and technology of radiometric investigations. Application of radioactive methods in the field of engineering geology, hydrology, and the control of ore enrichment processes is analyzed. No personalities are mentioned. There are no references.

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Zhuvagin, I. G., and Yu. A. Akchas'yanov. Use of Radioactive Isotopes in a New Method for Controlling the Results of a Hydraulic Rupture of the Bed

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110

Vasil'yeva, N. A., E. V. Sokolovskiy, and V. N. Maydebor. Use of Radioactive Hydrogen-Tritium Isotopes in Exploration and Exploitation of Oil Deposits for Control of Water Movement Along the Bed

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VASIL'YEVA, N.A.; SOKOLOVSKIY, E.V.; MAYDEBOR, V.N.

Results of investigating the motion of injected water in the oil bed
by using tritium, the radioisotope of hydrogen. Trudy VNI no.29:
266-277 '60. (MIRA 13:10)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut.
(Tritium) (Oil field flooding)

VASIL'YEVA, N. A., GOFSHTEYN, I. V.

"The Participation of Nuclei in the Metabolism of the Plant Cell."

report submitted for the First Conference on the problems of Cyto and Histochemistry, Moscow, 19-21 Dec 1960.

Laboratory of Enzymology of the Institute of Biochemistry Imeni A. N. Bakh,
Academy of Sciences USSR, Moscow.

VASIL'YEVA, N.F., inzhener; MAMONTOV, V.G., inzhener.

Cranes for unloading ties. Put.i put.khoz. no.4:13-14 '57.
(MLRA 10:5)

(Railroads--Ties)

VASIL'YEVA, N.G., dotsent

Osteoplasty in the surgical treatment of palatal defects. Trudy
Nauch.-issl.inst.stom. no.10:45-50 '62. (MIRA 15:10)
(PALATE--ABNORMITIES AND DEFORMITIES) (BONE GRAFTING)

VASIL'YEVA, N.G., dotsent; ANDRONIK, N.D., ispolnyayushchiy obyazannosti
assistenta; KALINIK, A.A., ordinator

Osteosynthesis in fractures of the mandible using periosteal
plexigals plates. Trudy Nauch.-issl.inst.stom. no.10:63-71 '62.
(MIRA 15:10)

(JAWS--FRACTURE)

(PLASTICS IN MEDICINE)

VASIL'YEVA, N.G.

Cross-effect of chlortetracycline and streptomycin on the dynamics of the distribution in the body of guinea pigs of Flexner's dysentery bacilli resistant to these antibiotics. Antibiotiki 10 no. 10:886-889 0 '65. (MIRA 18:12)

1. Leningradskiy nauchno-issledovatel'skiy institut antibiotikov.
Submitted Dec. 27, 1964.

VASIL'YEVA, N.G.

Effect of antibiotic therapy on the biliary microflora in chronic
cholecystitis. Antibiotiki 9 no.4:364-368 Ap '64. (MIRA 19:1)

1. Leningradskiy nauchno-issledovatel'skiy institut antibiotikov.

CHIRKIN, A.P., doktor tekhn. nauk, prof.; REZNIK, I.I., inzh.;
CHAROM'SKIY, A.D., doktor tekhn. nauk, prof., retsenzent;
VASIL'YEVA, N.G., inzh., red.; UVAROVA, A.F., tekhn.red.

[Diesel-engine fuel systems] Dizel'naiia toplivnaia ap-
paratura; spravochnik. Moskva, Mashgiz, 1963. 169 p.
(MIRA 16:11)

(Diesel engines--Fuel systems)

FOVIN, A.A.; VISHNYAKOV, B.S.; PROKHOROV, V.P.; KHAYEV, V.M.;
SHVEDSKIY, A.I.; ORLIN, A.S., doktor tekhn. nauk, prof.,
retsenzent; VASIL'YEVA, N.G., inzh., red.

[Modern tractor diesel engines; atlas of designs] Sov-
remennye traktornye dizeli; atlas konstruktsii. Moskva,
Mashgiz, 1963. 232 p. (MIRA 16:12)

(Tractors--Engines)

VASIL'YEVA, N.G., dotsent (Odessa, Meditsinskiy per., d.2)

Use of Filatov's grafts for covering extensive soft tissue defects
of the skull. Nov. khir. arkh. no.5:19-21 9-0 '60. (MIRA 14:12)

1. Kafedra gospital'noy khirurgii (zav. - doktor nauk K.G.Tagibekov)
Odesskogo meditsinskogo instituta.
(SKIN-GRAFTING) (SKULL--WOUNDS AND INJURIES)

VASIL'YEVA, N.G., kandidat meditsinskikh nauk

Using Filatov's T-pedicle in restoration of the lower portion of the nose following lupus. Khirurgia, no.4:14-18 Ap '55. (MLRA 8:9)

1. Chelyusno-litsevaya klinika (zav.prof. B.Ye. Frankenberg)
Odesskogo nauchno-issledovatel'skogo instituta stomatologii (dir
M.I.Kukhareva)

(LUPUS,

nose, plastic surg. reconstruction with Filatov's
T-flap)

(NOSE, diseases,

lupus surg. plastic reconstruction with Filatov's
T-flap.

(SKIN TRANSPLANTATION,

Filatov's T-flap in reconstruction of nose after lupus)

VASIL'YEVA, N.G., inzh.; GRACHEVA, Ye.V., inzh.

Economic efficiency of the automation of the production of packaged
ice cream. Khol.tekh. 40 no.6:7-8 N-D '63. (MIRA 17:4)

1: Vsesoyuznyy nauchno-issledovatel'skiy institut kholodil'noy
promyshlennosti.

1ST AND 2ND GROUPS PROCESSES AND PROPERTIES

CO

11d

Changes of the content of carbohydrates in wheat during the hardening against drought. I. M. Vasil'ev and N. G. Vasil'eva. *Bull. acad. sci. U. R. S. S., Class sci. math. nat.* 1934, No. 9, 1325-40 (in English 1340) (1935).—The hardening was produced by a temporary insufficient H₂O supply to plants kept in vegetative vessels. The loss of turgor and the beginning of dying off of the tips of the leaves was taken as the limit of the insufficient watering. On the day after the beginning of withering there was an increase of monosaccharides (I) and sucrose, and a decrease of hemicelluloses (II). When the tips of the leaves began to die, the sucrose content decreased; I and II increased. Immediately after watering the H₂O content in the tissues increased but remained lower than that of the controls (III); I decreased and became lower than that of III; the sucrose decreased, while II increased and exceeded that of III. When the plants recovered (8 days after watering) there was a decrease in H₂O content and I, while II and sucrose increased.

E. D. Walter

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

A-4

cc

Device for measuring rate of photochemical in photo. A. A.
 Nitschperovich and N. G. Sushkova. *Compt. rend. Acad. Sci.*
U.R.S.S., 1961, 22, 1515. An apparatus for making several
 parallel determinations at the same time is described. R. H. H.

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION
 SOURCE IDENTIFICATION
 REFERENCE
 ABSTRACT
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VASIL'YEVA, N. G.

"Influence of Repeated Withering of Plants on the Colloid-Chemical Properties of Protoplasm." Thesis for degree of Cand. Biological Sci. Sub 29 Apr 49, Inst of Plant Physiology imeni K. A. Timiryazev, Acad Sci USSR

Summary 82, 18 Dec 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.

VASIL'YEVA, N.G.

Effect of high temperatures on colloidochemical properties of plant protoplasm. Doklady Akad.Nauk S.S.S.R. 88, 341-4 '53. (MLRA 6:1)
(CA 47 no.14:7040 '53)

1. VASIL'YEVA, N. G.
2. USSR 600
4. Protoplasm
7. Change in protoplasm permeability of spring wheat leaf cells during irrigation,
Dokl. AN SSSR, 88, No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

VASIL'YEVA, N.G.

Interrelationship of free and bound water in plant leaves in relation
to their drought resistance. Fiziol.rast. 2 no.3:209-214 My-Je '55.
(MLRA 8:11)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva Akademii nauk
SSSR, Moscow
(Plants--Water requirements)

VASIL'YEVA, N.G.; BURKINA, Z.S.

Water regimen of cell organoids. *Fiziol. rast.* 7 no.4:401-406 '60.
(MIRA 13:9)

L. K.A. Timiriazev Institute of Plant Physiology, U.S.S.R. Academy of
Sciences, Moscow.
(Cells) (Water in the body)

100 AND 1000 ORDERS PROCESSES AND PROPERTIES INDEX	
VASILYEVA N.G.	
Bluing ferrous metals. N. G. Vasileva. USSR. 65,868, Feb. 28, 1949. Articles to be blued are thoroughly cleaned and struck in a Cu-plating soln. The Cu-coated article is treated in a soln. of a hyposulfite and HNO ₃ at room temp. This is followed by washing, drying, and applying a film of oil. M. Hesch	
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION	
GROUP 1 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1	DIVISION 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
MATERIAL INDEX OPEN COMMON ELEMENTS	SECTION 10 9 8 7 6 5 4 3 2 1

PAVLOVA, V.N.; VASIL'YEVA, N.G.; KASHLINSKAYA, S.E.

Separation and determination of small amounts of tellurium.
Zav.lab. 27 no.8:965-966 '61. (MIRA 14:7)

1. Noril'skiy gorno-metallurgicheskiy kombinat imeni A.P.
Zavenyagina. (Tellurium--Analysis)

YASIL'YEVA, Nadezhda Grigor'yevna; POZIN, M.M., kand. ekon. nauk,
nauchnyy red.; KAPLUN, M.S., red.; MAMONTOVA, N.N., tekhn.
red.

[Economic effectiveness of the automation of ammonia refri-
gerating units] Ekonomicheskaya effektivnost' avtomatizatsii
ammiachnykh kholodil'nykh ustanovok; nauchnoe soobshchenie.
Moskva, Gostorgizdat, 1962. 13 p. (MIRA 15:8)
(Refrigeration and refrigerating machinery)
(Automatic control)

IVANOV, Yu.B.; SOLNTSEVA, T.Ye.; VASIL'YEVA, N.G., inzh., red.

[Atlas of assembly drawings for details] Atlas sborochnykh
chertezhei dlia detalirovok. Moskva, Mashgiz, 1963. 72 p.
(MIRA 17:5)

VASIL'YEVA, N.G.; BURKINA, Z.S.

Determining the water content in vacuolar protoplasmic sap and in chloroplasts. Fiziol. rast. 10 no.3:387-388 My-Je '63. (MIRA 16:6)

1. K.A.Timiriazev Institute of Plant Physiology, U.S.S.R.
Academy of Sciences, Moscow.
(Sap) (Chromatophores) (Plants--Chemical analysis)

VASIL'YEVA, N.G.; BURKINA, .Z.S.

Uptake of heavy-oxygen water by Vicia faba leaves and its
translocation in the plant. Fiziol. rast. 11 no.1:139-141
Ja-F '64. (MIRA 17:2)

1. Institut fiziologii rasteniy imeni Timiryazeva AN SSSR,
Moskva.

VOZNESENSKAYA, Ye.V.; SLUGINA, Z.P.; KUTUKOVA, V.I.; YAKOBI, F.S.;
SHAKHSUVAROVA, G.V.; VASIL'YEVA, N.I.; GRYAZNOV, B.V.; ROZENSHTEYN,
M.Z.

Production of low pour-point oils from eastern paraffin-base
crudes by means of dewaxing with the aid of selective solvents.
Trudy VNII NP no.7:69-78 '58. (MIRA 12:10)
(Petroleum--Refining) (Lubrication and lubricants)

S/689/61/000/000/000/000
D205/D303

18 121
AUTHORS: Kozlovskaya, V.P., Vasil'yeva, N.I., and Karpovick, Ya.M.

TITLE: Conditions for manufacturing pressed articles from the aluminum alloy D16 (D16) having a high strength at room and elevated temperatures

SOURCE: Fridlyander, I.K., V.I. Dobatkin, and Ye.D. Zakharev, eds. Deformiruyemyye alyuminiyevyye splavy; sbornik statey. Moscow, 1961, 64 - 75

TEXT: The alloy D16 has a high strength at room temperature and weakens relatively little at higher temperatures. It can, therefore, be used for articles which undergo heating during operation. It is known that the strength of pressed articles made of D16 may vary from 40 to 60 kg/mm², this variation depending on the composition, production and the heat treatment. Because D16 was found suitable for use in articles working at elevated temperatures it was necessary to establish the possible variations in strength on heating pressed articles made of this alloy. According to ГОСТ 4784-49 (GOST-4784-49) the con-
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