

SEMENDYAYEVA, T.K.

Improvement of quality of toilet and household soaps by the addition  
of phospholipide concentrate. Masloboyno Zhirovaya Prom. 18, No.4,  
15-17 '53. (MLRA 6:4)  
(CA 47 no.17:9037 '53)

SEMENDYAYEVA, T. K.

С. И. В. Лешин, А. А. и Семандыяева, Т. К.: Переработка  
шпата (Reprocessing of Rape). Moscow: Mashinopromiz-  
dat. 1954. 42 pp.

(1)

SEMENDYAYEVA, T.K., inzhener.

Some data on the coloring substances of cottonseed oils. Masl.-zhir.  
prom. 23 no.4:7-10 '57. (MIRA 10:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut myasnoy promysh-  
lennosti.

(Coloring matter) (Cottonseed oil)

SEMENEKO, B.A.

RYZHKOV, P.M.; SEMENEKO, B.A.

Dust control in large cross-section horizontal drifting. Gor.zhur.  
no.9:59-61 S '57. (MLRA 10:9)

1. Unipromed'.

(Mine dusts)

SEMENENKO, A.D.

Effect of the nervous system on the erythrocyte sedimentation rate.  
Trudy Vses.ob-va fiziol.biokhim.i farm. 2:88-91 '54. (MIRA 8:7)

1. Kafedra normal'noy fiziologii Kazakhskogo gosudarstvennogo meditsinskogo instituta im. V.M.Molotova.

(NERVOUS SYSTEM, physiology,  
eff. of stimulation on erythrocyte sedimentation in  
dogs)

BLOOD SEDIMENTATION, physiology,  
eff. of nervous stimulation in dogs)

SEMENENKO, A.A., inzh.; VASIL'YEV, M.Ya., inzh.; ALEKSEYEV, Yu.P., inzh.

Preparing a fireproof suspension without ethyl silicate  
solvents for investment casting. Mashinostroenie no.6:63-  
64 N-D '65. (MIRA 18:12)

SEMELENKO, A.D.

U.S.S.R.

Influence of the nervous system on the rate of sedimentation of erythrocytes. A. D. Semencenko. *Izvest. Akad. Nauk Kazakh. S.S.R. No. 135, Ser. Med. i Med. No. 5, 97-104 (1954) (in Russian).*—The rate of sedimentation of erythrocytes is very low in young pups, rising with age to a max. at 60-81<sup>st</sup> days of age, and leveling at adult value at 3.5-4 months. Elec. stimulation of the gastric nerve (peripheral section) retards the sedimentation, reduced by ligation of adrenal veins; interrupted irritation of the vago-sympathetic nerve in the neck accelerates the sedimentation. Sedimentation is accelerated in rabbits by irritation of the vagus nerve in the neck. In young pups the sedimentation rate is the same in the blood which goes to and from the liver and the intestinal canal; at 60-81<sup>st</sup> days of age the blood passing through the liver shows a decided acceleration of sedimentation while that passing through the intestine shows a retardation; in later life the difference is very small. The effects of these 2 organs are probably realized through alteration of the proportions of the protein components in the plasma, in turn effected by alteration of capillary permeability. G. M. Kosolapoff

USSR/Plant Physiology. Photosynthesis

I

Abs Jour : Ref Zhur-Biol., No 13, 1958, 58193

Author : ~~Semenenko A. D.~~

Inst : Section of Astrobotany, Academy of Sciences  
KazakhSSR,

Title : Dynamics of Spectral Luminosity in Etiolated  
Plants

Orig Pub : Tr. Sektora astrobotan., 1957, 5, 187-198

Abstract : Grafts of the 2nd and 3rd generations of trans-  
plants of the Shtambov tomato and the bitter-  
sweet nightshade on the tubers of the Smyslov-  
skiy potato were spectrographed in September  
1954, during the period of vegetation growth. In  
the visible area of the spectrum (359-759 m $\mu$ )  
the etiolated plants at the moment of their ex-  
posure to light reflected the largest number of

Card 1/2



SEMENENKO, A. D.

USSR/Plant Physiology. Photosynthesis

I

Abs Jour : Ref Zhur-Biol., No 13, 1958, 58194

Author : Semenenko A. D.

Inst : Section of Astrobotany, Academy of Sciences,  
Kazakh SSR

Title : Spectral Reflective Capacity of Tomatoes when  
Nonroot Fed with Extracts of Leaves of Other  
Plants

Orig Pub : Tr. Sektora astrobotan., 1957, 5, 199-206

Abstract : The reflection capacity of the leaves of the me-  
dial layer of the Mayak tomato plant, the tops  
of which before being implanted were kept in so-  
lutions of extracts of potato leaves, and the bit-  
tersweet and deadly nightshade for periods of 6  
hours (during the first 24 hours), 8 hours (du-  
ring the second 24 hour. period), and for 24

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SEMIENENKO, A. D.

5 (1) PAGE 1 BOOK EXPLANATION 807/181

Abdomiya mek Kazakhskiy SSSR. Sektor astrobotaniki.

Trudy, 6 (Transactions of the Astrobotanical Sector, Kazakh SSSR, Academy of Sciences, Vol. 6) Alma-Ata, Izd-vo AN Kazakhskiy SSSR, 1958. 207 p. Karta slip inserted. 1,500 copies printed.

Mis.: L.N. Mozvichera and T.I. Shervinsk; Tech. Ed.: P.F. Altferov; Editorial Board: G.A. Tikhov (resp. Ed.), N.I. Buronov (Deputy Resp. Ed.) and V.B. Bobukova (Secretary)

PURPOSE: This book is intended for scientists engaged in the fields of astrobotany and astronomy.

COVERAGE: The book summarizes the results gathered from observations of the planet Mars made during its most favorable opposition in 1956. Key evidence was obtained to prove the existence of vegetation on that planet. Visually, observations were carried out with the Breidichin telescope and the Minskian telescope ATZ-7 (the Makinor type). Photographs were taken with astrobotanically they were made using light filters. The book contains a number of critical studies on the work Elizaviro Yelansky by A.I. Oparin and V.G. Pesenkov, in which the existence of any vegetable life had been denied. Each article is accompanied by references.

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Cart 3/4

SEMENENKO, A.D.

Using photographic spectrophotometry in studying spectral brightness  
of vegetative hybrids belonging to the solanaceae family. Trudy  
Sekt.astrobot. AN Kazakh.SSR 6:158-195 ' 58. (MIRA 11:12)  
(Gamopetalae--Spectra) (Spectrophotometry)

SHAKHOV, A.A., SEMENENKO, A.D.

Absorption of light by plants in polar regions [with summary  
in English]. Zhur.biol. 19 no.6:428-438 N-D '58 (MIRA 11:12)

1. Institut fiziologii rasteniy imeni K.A. Timiryazeva AN SSSR.  
(ARCTIC REGIONS--PHOTOSYNTHESIS)  
(ABSORPTION OF LIGHT)

SEMENENKO, A. D., Candidate of Biol Sci (diss) --- "The spectral clarity of certain vegetative hybrids of the family Solanaceae". Alma-Ata, 1959. 13 pp (Kazakh State U im S. M. Kirov), 150 copies (KL, No 22, 1959, 112)

SEMENENKO, A.D.

Spectrophotometric studies of etiolated hybrid tomatoes during  
greening in ontogenesis. Trudy Sekt.astrobot.AN Kazakh SSR  
7:178-192 '59. (MIRA 13:5)  
(Tomatoes--Spectra)

SEMEHENKO, A.D.

Changes in the spectral brilliance of etiolated hybrid tomatoes during greening with varying periods of illumination. Trudy  
Sekt.astrobot.AN Kazakh SSR 7:193-199 '59.

(MIRA 13:5)

(Tomatoes--Spectra)

BUSHUYEVA, K.A., dotsent; POLEZHAYEV, Ye.F., dotsent; SEMENENKO, A.D.,  
assistant

Studying reflex thresholds of atmospheric pollution by electro-  
encephalography. Gig. i san. 25 no.1:57-61 Ja '60. (MIRA 13:5)

1. Iz kafedry kommunal'noy gigiyeny i kafedry klinicheskoy i  
eksperimental'noy fiziologii Tsentral'nogo instituta usover-  
shenstvovaniya varchey.

(POLLUTION)

(ELECTROENCEPHALOGRAPHY)



SEMENENKO, A.D.

Optical properties of different wheat species. Trudy Sekt. astrobot.  
AN Kazakh. SSR 8:46-28 8:46-48 '60. (MIRA 13:12)  
(Plants--Optical properties) (Wheat)

SEMENENKO, A.D.

Spectral brightness of wheat leaves and ears. Trudy Sekt. astrobot.  
AN Kazakh. SSR 8:49-53 '60. (MIRA 13:12)  
(Plants—Optical properties) (Wheat)

SEMENENKO, A.D.

Optical properties of etiolated oat plants. Trudy Sekt. astrobot.  
AN Kazakh. SSR 8:54-58 '60. (MIRA 13:12)  
(Plants--Optical properties) (Etiolation) (Oats)

BUSHTUYEVA, K.A.; POLEZHAYEV, Ye.F.; SEMENENKO, A.D.

Effect of subliminal olfactory stimulation on reflex activity.  
Fiziol. zhur. 46 no. 4:452-457 Apr '60. (MIRA 13:10)

1. From the Department of Clinical and Experimental Physiology  
and Department of Communal Hygiene, Central Institute for  
Medical Improvement, Moscow.  
(ELECTROENCEPHALOGRAPHY) (SMELL)

BUSHTUYEVA, K.A.; POLEZHAYEV, Ye.F.; SEMENENKO, A.D.

Changes in optic choroxy and the electroencephalogram caused by the use of substances acting on the trigeminal nerve endings. Biul. eksp. biol. i med. 49 no.3:65-69 Mr '60. (MIRA 14:5)

1. Iz kafedry klinicheskoy i eksperimental'noy fiziologii (zav. - deystvitel'nyy cheln' AMN SSSR V.V. Parin) i kafedry kommunal'noy gigiyeny (zav. - prof. V.A. Ryazanov) T Sentral'nogo instituta usovershenstvovaniya vrachey (dir. - M.D. Kovrigina), Moskva. Predstavlena deystvitel'nyy chlenom AMN SSSR V.V. Parinyu.  
(TRIGEMINAL NERVE) (OPTIC NERVE)  
(ELECTROENCEPHALOGRAPHY)

SEMENENKO, A.D., kand. med. nauk

Use of functional electroencephalography in the study of  
the effect of imperceptible concentrations of atmospheric  
pollution on the human organism. Gig. i san. 28 no.7:49-55  
Jl '63. (MIRA 17:1)

1. Iz kafedry kommunal'noy gigiyeny Tsentral'nogo instituta  
usovershenstvovaniya vrachey.

R.A. FEDELIDZE, M.A.; SEMENENKO, A.D.; SUGULADZE, T.D.

Analysis of temporary connections in the self-organizing system  
of the plant organism. Izv. AN SSSR. Ser. biol. no.4:558-568 J1-  
Ag '65. (MIRA 18:7)

1. Institut kibernetiki AN GruzSSR i Institut biokhimii im. A.N.  
Bakha AN SSSR.

SEMENENKO, A.I.

Make efficient use of rolling stock. Sakh.prom.29 no.6:39 '55.  
(MIRA 9:1)

1.Chupakhovskiy sakharnyy zavod.  
(Railroads--Freight cars) (Sugar beets--Transportation)



L 51515-65 EWT(l)/EWT(m)/T/EWP(t)/EWP(b)/WA(c) IJP(c) JD/GO  
ACCESSION NR: AP5010737 UR/0181/65/007/004/1216/1220

AUTHOR: Semenenko, A. I.

TITLE: System of quantum kinetic equations for electrons in metals with overlapping bands

SOURCE: Fizika tverdogo tela, v. 7, no. 4, 1965, 1216-1220

TOPIC TAGS: metal, electric conductivity, conduction band, interband transition, quantum kinetics

ABSTRACT: A diagram technique developed by G. B. Konstantinov and V. I. Perel' (ZhETF v. 39, 197, 1960) is used to construct a system of quantum kinetic equations which take into account the interband electron transitions due to scattering not only by photons but also by phonons. The reason for the investigation is that in metals with overlapping bands (such as graphite), the electrons can go from band to band at low temperatures, and be scattered by thermal phonons, so that an analysis of the interband transitions becomes of interest even at the lowest temperatures. A Hamiltonian in which account is taken of the interband transitions is derived for the interaction between electrons and the phonons. The static current

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ACCESSION NR: AP5010737

due to the nondiagonal part of the statistical operator is estimated for a metal with a Fermi surface that has no degeneracy points. "The author is deeply grateful to M. I. Kaganov under whose guidance the work was done." Orig. art. has: 23 formulas.

ASSOCIATION: Fiziko-tehnicheskiy institut nizkikh temperatur, Khar'kov (Physico-technical Institute of Low Temperatures)

SUBMITTED: 17 Jun 64

ENCL: 00

SUB CODE: NP, MM

NR REF SOV: 004

OTHER: 001

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Card 2/2

L 24394-66 EWI(1)/T IJP(c)  
ACC NR: AP6010984 SOURCE CODE: UR/0056/66/050/003/0630/0641  
AUTHORS: Kaganov, M. I.; Semenenko, A. I.  
ORG: Physicotechnical Institute of Low Temperatures AN UkrSSR, B<sup>47</sup>  
Khar'kov (Fiziko-tehnicheskij institut nizkikh temperatur AN UkrSSR)

TITLE: Singularities of the phonon absorption coefficient and the geometry of the Fermi surfaces

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 3, 1966, 630-641

TOPIC TAGS: phonon interaction, absorption coefficient, phonon spectrum, dispersion equation, electron interaction, spin wave

ABSTRACT: The authors consider the singularities which are produced in the phonon spectrum and in the phonon damping coefficient in metals by phonon-electron interaction. The singularity consists in the abrupt vanishing of the absorption coefficient when the phonon momentum is equal to twice the Fermi electron momentum. To analyze these singularities, the authors establish a connection between these singularities and the properties of the Fermi surface at absolute

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L 24394-66

ACC NR: AP6010984

zero. The connection established is between the singularities and the local properties of the Fermi surface. It is shown that the difference in the singularities is determined not so much by the difference between the local properties on the Fermi surface, as by the difference in the character of the tangency of this surface to its displaced analog. The connection between the singularities of the absorption coefficient and the singularities in the spectrum is established with the aid of dispersion relations similar to the Kramers-Kronig relations. Allowance for a finite temperature smear out the singularities somewhat. The extent of the singularity is limited somewhat by the renormalization of the spectrum-phonon interaction when the electron-electron interactions are taken into account. In the case of metals possessing a magnetic structure, the singularities should be observed not only in the phonon spectrum but also in the spin-wave spectrum. Orig. art. has: 6 figures and 37 formulas.

SUB CODE: 20/ SUBM DATE: 28Jul65/ ORIG REF: 005/ OTH REF: 004

Card

2/20LR

SEMENENKO, A.N., inzhener.

Book which is not free of errors ("Manual for operating FP and EP screw presses in processing sunflower seeds." I.P. Kolpakov. Reviewed by A.N. Semenenko.) Masl.-zhir.prom. 18 no.5:29-30 My '53. (MLRA 6:5)  
(Kolpakov, I.P.) (Power presses)

SEMENENKO, A. N.

Experiment on air-blasting of cookers. A. N. Semenenko  
(2nd Oil Plant, Saratov). *Masloboino-zakopnyye Prisy* 19  
No. 4, 25-8(1954).—The efficiency of a battery of 6 cookers  
(I) was increased 10-15% by passage of dry air through the  
I during processing of crushed seeds. It is allowed moisture  
to be drawn off at lower temp., resulting in better quality  
of soybean cake and flour and lowering the acid no. of the oil.  
Vladimir N. Krukovskiy

SEMENENKO, A.N.; KUZICHEV, G.I., retsenzent; BUKHARIN, V.V., redaktor;  
~~SEMENOVA, N.O.~~, redaktor; CHEBYSHEVA, Ye.A., tekhnicheskii redaktor

[Installation, operation and repair of medium sized screw presses  
for preliminary extraction of oil] Ustroistvo, ekspluatatsiia i  
remont forpressov srednei modeli. Moskva, Pishchepromizdat, 1955.  
113 p. (MLRA 9:1)

(Oil industries--Equipment and supplies)

SEMENENKO, A.N., inzhener.

Change in the design of the cone insert of the FP screw press.  
Masl:shir.prom. 19 no.4:26-27 '54. (MLRA 7:7)

1. 2 Saratovskiy maslozavod.  
(Power presses)



SEMENENKO, A.N., inzhener

Urgent problems in organizing and planning repair of oil mill  
equipment. Masl.-zhir.prom. 20 no.3:4-5 '55. (MLRA 8:7)

1. Saratovskiy Rasmastlotrest.  
(Oil industries--Equipment and supplies)

ALESHIN, Ye.P., kand. biol. nauk; YARKIN, S.A.; SEMENENKO, A.N.;  
KIRICHENKO, K.S., kand. sel'khoz. nauk; CHURIKOV, I.I.;  
SAPELKHIN, V.K.; RODIONOV, M.S.; RADIN, Yu.P.; FEDOROVA,  
Yu.A., red.; SAYTANIDI, L.D., tekhn. red.

[Growing rice on irrigated lands] Vozdelyvanie risa na  
oroshaemykh zemliakh. Moskva, Izd-vo M-va sel'khoz.  
RSFSR, 1963. 101 p. (MIRA 16:12)

(Rice)

SEMENENKO, A.N., inzh. (Krasnodar)

Some problems of the formation of the balance of ground waters  
in the rice irrigation systems of the lower Kuban Valley. Gidr.  
i mel. 16 no.7:14-20 J1 '64. (MIRA 17:11)

SEMENENKO, A.N., inzh.

Experimental investigation of the stressed state of spherical bottoms of pressure vessels with openings. Izv.vys.ucheb.zav.; mashinestr. no.7:21-25 '64. (MIRA 17:10)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Baumana.

SEMENENKO, A.P., akademik, otv. red.; SHCHERBAK, N.P., kand.  
geol.-miner. nauk, red.; BARTNI'SKIY, Ye.N., kand. khim.  
nauk, red.; IOGVIN, E.I., inzh., red.; CHEKHOVICH, N.Ya.,  
red.

[ **Geochronology** of the Precambrian of the Ukraine] Geo-  
khronologiya dokembriia Ukrainy. Kiev, Naukova dumka,  
1965. 261 p. (MIRA 18:9)

1. Akademiya nauk URSR, Kiev. Instytut geologichnykh nauk.
2. Akademiya nauk Ukr.SSSR (for Semenenko).

KRAVTSEV, A., rabochiy; BELYAYEV, I.; BRILYAKOV, V.; RYZHKOV, F.;  
SEMENENKO, B.

Correspondence conference of our readers. Okhr.truda i  
sots.strakh. 5 no.1:26 Ja '62. (MIRA 15:2)

1. Bezhitskiy staleliteynny zavod, g. Bryansk (for Kravtsev).
2. Laboratoriya ventilyatsii i obspylivaniya vozdukha  
Ural'skogo nauchno-issledovatel'skogo i proyektного instituta  
mednoy promyshlennosti (for Belyayev, Brylyakov, Ryzhkov,  
Semenenko).

(Industrial hygiene--Periodicals)

SEMENENKO

SEREDA, B.K., kandidat tekhnicheskikh nauk; SHKOL'NIKOVA, R.Sh., kandidat khimicheskikh nauk; GNILOVSKOY, V.G., inzhener; SEMENENKO, B.A., inzhener.

Testing of drills supplied with dry dust collectors in drilling vertical boreholes. Gor.zhur. no.21:47-49 D '56. (MIRA 10:1)  
(Boring machinery--Testing)

YAKSHINA, L.I., nauchnyy sotrudnik; SEMENENKO, B.A., starshiy nauchnyy sotrudnik

Introduction of complex measures for controlling dust in copper pyrite mines. Sbor. rab. po silik. no.2:41-46 '60. (MIRA 14:3)

1. Sverdlovskiy nauchno-issledovatel'skiy institut gigiyeny truda i profpatologii (for Yakshina). 2. Institut Unipromed' (for Semenenko).  
(MINE DUSTS)



SEMENENKO, B.A.; BOGAYEVSKIY, O.A.; KHAL'NIKOV, V.G.

Ventilation of an open pit with a turbojet engine. Gor. zhur.  
no.1:32 Ja '62. (MIRA 15:7)

1. Ural'skiy nauchno-issledovatel'skiy i proyektnyy institut  
mednoy promyshlennosti, Sverdlovsk.  
(Ural Mountains—Mine ventilation)  
(Turbomachines)

RYZHKOV, F.N., kand.tekhn.nauk; SEMENENKO, B.A., gornyy inzh.

Number of measures for keeping down dust in mining ore deposits.  
Sbor. rab. po silik no.3:41-45 '61. (MIRA 15:10)

1. Ural'skiy nauchno-issledovatel'skiy i proyektnyy institut mednoy  
promyshlennosti.

(Mine dusts)

SEMENENKO, B. M.

Pharmacologic analysis of some properties of Ichthyol.  
B. M. Semenenko. *Nauch. Zapiski Belokerkovsk. Sel'skok-  
hoz. Inst.* 3; No. 1, 161-70 (1952/53); *Referat. Zhur. Khim.*  
1954. Np. 43419. E. Werbicki

*SEMENENKO D.K.*  
~~SEMENENKO, D.K.~~

SEMENENKO, D.K.; TURCHANINOV, I.A., kand. tekhn. nauk.

Behavior of rocks during underground gasification of coal.  
Podzem.gaz.ugl. no.4:31-39 '57. (MIRA 11:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Podzemgaz.  
(Coal gasification, Undergorund)

SEMENENKO, D.K.

Methods of calculating losses of blow, coal, and gas. Podzem.gaz.  
ugl. no.1:55-60 '58. (MIRA 11:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut  
podzemnoy gazifikatsii ugley.  
(Coal gasification, Underground)

SEMENENKO, D.K.; KHENKINA, S.A.

Effect of certain factors on losses of input air and gas at the  
Moscow Basin "Podzergaz" Station. Podzem. gaz. ugl. no.3:20-23  
'58. (MIRA 11:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Podzemgaz.  
(Moscow Basin--Coal gasification, Underground)

~~SEMONENKO, D.K.~~; KHENKINA, S.A.

Effect of hydromechanical factors and structural characteristics  
of underground gas producers on the losses of blow and gas.  
Podzem.gaz.ugl. no.2:26-29 '59. (MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut  
podzemnoy gazifikatsii ugley.  
(Coal gasification, Underground)

SEMNENKO, D.K.; RUSSO, Yu.V.; OVCHINNIKOV, V.M.

Permeability to gas of burnt-out areas filled with slaggy rock.  
Podzem.gaz.ugl. no.4:19-21 '59. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut Podzemgaz.  
(Coal gasification, Underground)



SEMENENKO, D.K.

Selecting the conditions of gas blowing in underground coal gasification. Nauch.trudy VNIIPodzemgaza no.7:21-27 '62.

(MIRA 15:11)

1. Laboratoriya gornogeologicheskaya Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.  
(Coal gasification, Underground)

SEMENENKO, D.K.

Conditions of gas flow in the gasification channel.  
Nauch. trudy VNII Podzemgaza no.6:2C-27 '62. (MIRA 15:11)

1. Laboratoriya gornogeologicheskaya Vsesoyuznogo  
nauchno-issledovatel'skogo instituta. podzemnoy  
gazifikatsii ugley.

(Coal gasification, Underground)  
(Gas flow)

SEMENENKO, D.K.

Studying the conditions of gas flow in the coal seam.  
Nauch. trudy VNII Podzemgaza no.6:28-42 '62. (MIRA 15:11)

1. Laboratoriya gornogeologicheskaya Vsesoyuznogo  
nauchno-issledovatel'skogo instituta podzemnoy  
gazifikatsii ugley.

(Coal gasification, Underground)  
(Gas flow)

KASHKIN, A.A.; SEMENENKO, D.K.; KHENKINA, S.A.

Gas losses at the south Abinskiy underground gasification station. Nauch. trudy VNIIPodzemgazu no.8:12-21 '62.

(MIRA 16:6)

1. Yuzhno-Abinskaya stantsiya "Podzemgaz" i laboratoriya gornogeologicheskaya Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

(Abinskiy region---Coal gasification, Underground)

SEMENENKO, D.K.

Effect of gas losses on its cost. Nauch. trudy VNIIPodzem-  
gaza no.9:111-114 '63. (MIRA 16:11)

1. Laboratoriya gornogeologicheskaya Vsesoyuznogo nauchno-  
issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

SOMENINOV, D.K.

Effect of hydrodynamic factors on gas losses in underground gasification. Nauch.trudy VNIIPodzemnaya no.10:7-15 '83.

Methods for calculating gas losses in underground coal gasification. 1984:10-17

Efficiency of a method of hermetic sealing of underground gas generators at the "Podzemgaz" gas producer plant in "Yuzhno-Abinskaya". Izv.1:51-55 (MIRA 1985)

7. Laboratoriya gornogeologicheskaya Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

SEMENENKO, D.K., kand.tekhn.nauk; KHENKINA, S.A.; SHUBIN, Ya.V.

Computing the gas losses in the joint operation of several underground gas producers. Trudy VNIIPodzemgaza no.13:17-21 '65.

(MIRA 18:8)

1. Laboratoriya gornogeologicheskaya Vsesoyuznogo nauchno-issledovatel'skogo instituta podzemnoy gazifikatsii ugley.

SEMENENKO, D.K., kand.tekhn.nauk

Loosening of rocks during underground coal gasification in the  
Moscow Basin. Trudy VNIIPodzengaza no.13:32-35 '65.

(MIRA 13:8)

1. Laboratoriya gornogeologicheskaya Vsesoyuznogo nauchno-  
issledovatel'skogo instituta podzemnoy gasifikatsii ugley.



REVVA, M.K.; SEMENENKO, D.K., kand. tekhn. nauk; SMIRNOV, V.G.

Investigating the process of underground gasification of coal  
in Poland. Trudy VNIIPodzemgaza no.12:161-163 '64.  
(MIRA 18:9)

BALKOV, P.P.; SEMENENKO, D.P.; KOVAL', V.A.; ANGELI, A.I.

Automatic electric car scales for loading coke ovens. Koks i khim.  
no.2:25-27 '61. (MIRA 14:2)

1. Odey'skiy sovmarkhoz (for Balkov). 2. Stalinskiy koksokhimicheskiy zavod (for Semenenko). 3. Spetsial'noye konstruktorskoye byuro ispytatel'nykh mashin (for Koval', Angeli).  
(Coke ovens)

SEMENENKO, D.P., inzh.

Industrial fuel and heat consumption in Stalino Province.  
Kompl. vyk. pal.-energ. res. Ukr. no. 1:257-266 '59.

(MIRA 16:7)

(Donetsk Province--Fuel)

SEMENENKO, D.P., inzh.

Completa processing of solid fuels. Kompl. vyk. pal.-energ.  
res. Ukr. no.1:112-116 '59. (MIRA 16:7)

(Coal--Carbonization)

CHMUTOV, K.V., otv. red.; SEMENENKO, E.I., red.

[Ion-exchange technology] Ionoobmennaya tekhnologiya.  
Moskva, Nauka, 1965. 279 p. (MIRA 18:4)

1. Akademiya nauk SSSR. Institut fizicheskoy khimii.
2. Chlen-korrespondent AN SSSR (for Chmutov).

ROGINSKIY, S.Z.; SEMENENKO, E.I.; YANOVSKIY, M.I.

Possibility of carrying out the catalytic dehydrogenation under chromatographic conditions. Dokl. AN SSSR 153 no.2:383-385 N '63. (MIRA 16:12)

1. Institut khimicheskoy fiziki AN SSSR. 2. Chlen-korrespondent AN SSSR (for Roginskiy).

SEMENENKO, E.I.; ROGINSKIY, S.Z.; YANOVSKIY, M.I.

Combined radiochromatography technique for studying the mechanism of heterogeneous catalytic reactions. *Kin. i kat.* 6 no.2:320-328 Mr-Apr '65. (MIRA 18:7)

1. Institut khimicheskoy fiziki AN SSSR.

SEMENENKO, E.I.; ROGINSKIY, S.Z.; YANOVSKIY, M.I.

Catalytic dehydrogenation of n-butylenes under pulsed chromatographic conditions. Kin. i kat. 5 no.3:490-495 My-Je '64.

(MIRA 17:11)

1. Institut khimicheskoy fiziki AN SSSR.



POPOV, K.S.; SEMENENKO, G.F.

Regions of production of wine materials and grape varieties  
for the making of champagne. Trudy VNIIViV "Magarach" 13:  
84-107 '64. (MIRA 17:12)

1. Semenenko, G.I.
2. USSR (600)
4. Hybridization, Vegetable
7. Change in the content of nucleoproteids in plants during vegetative hybridization.  
Biokhimiia 17 no.6, 1952.

9. Monthly List of Russian Accessions. Library of Congress, March 1953, Unclassified.

SEMENENKO, G.I.

Changes in the protein metabolism of grafts and vegetative hybrids  
of the nightshade family. Uch.zap.FHGU 46:27-38 '53.  
(MIRA 11:11)

1. Kafedra fiziologii rasteniy i mikrobiologii Khar'kovskogo gosudarstvennogo universiteta.  
(Nightshade) (Grafting) (Protein metabolism)

SEMENENKO, G.I.

Effect of heteroauxin on protein metabolism in seedlings. Uch.zap.  
KHGU 46:109-112 ' 53. (MIRA 11:11)

1. Kafedra fiziologii rasteniy i mikrobiologii Khar'kovskogo gosudar-  
stvennogo universiteta.  
(Indoleacetic acid) (Protein metabolism)

SEMENENKO, G.I.; TIMASHEVA, O.A.; SUKACHEV, V.N., akademik.

Vitality of the hybrid progeny of intergeneric Solanaceae grafts. Dokl. AN  
SSSR 93 no.1:159-162 N '53. (MIRA 6:10)

1. Akademiya nauk SSSR (for Sukachev). 2. Khar'kovskiy gosudarstvennyy  
universitet im. A.M.Gor'kogo (for Semenko and Timasheva). (Potatoes)

SEMENENKO, G.I.; TIMASHOVA, O.A.

Nucleic acids content in leaves in vegetative hybridization.  
Biokhimiia 19 no.5:543-548 S-O '54. (MLRA 7:11)

1. Kafedra fiziologii rasteniy Kharkovskogo gosudarstvennogo universiteta.

(PLANTS, metabolism,  
nucleic acids, eff. of hybridization)

(NUCLEIC ACIDS, metabolism,  
plants, eff. of hybridization)

(HYBRIDITY,  
plants, eff. on nucleic acids metab.)

SEMELENKO, G. I.

USSR/ Agriculture - Biochemistry

Card 1/1 Pub. 22 - 41/62

Authors : Semenenko, G. I.

Title : Activity of ribonuclease of sprouting and ripening wheat and pea seeds

Periodical : Dok. AN SSSR 102/3, 575 - 577, May 21, 1955

Abstract : The results obtained during the study of the hydrolytic activity of ribonuclease in the process of sprouting and ripening of summer wheat and pea seeds are reviewed. Twelve references: 11 USSR and 1 USA (1928-1952). Tables.

Institution : The A. M. Gorkiy State Univ. Kharkov

Presented by: Academician A. I. Oparin, February 17, 1955

SAMOKHVALOV, G.K., doktor biologicheskikh nauk; SEMENENKO, G.I., dotsent,  
otvetstvennyy redaktor; CHERNYSHENKO, Ya.T., tekhnicheskiiy redaktor

[New studies on the carbon intake of plants] Novoe ob uglernom  
pitanii rastenii. Izd. 2-oe, perer. i dop. Khar'kov, Izd-vo Khar'-  
kovskogo gos. univ. im. A.M.Gor'kogo, 1956. 118 p. (MLRA 10:1)  
(Plants--Nutrition) (Carbon)



SEMENENKO  
~~SEMENKO~~ G. I.

USSR/Physiology of Plants. Respiration and Metabolism

I-1

Abs Jour : Ref Zhur-Biologiya, No 2, 1958, 5611  
Author : G. I. Semenenko, O. A. Timashova.  
Inst : Kharkov University.  
Title : Metabolism of Proteins and Nucleic Acids.  
Orig Pub : Uch. zap. Dzharkovsk. un-t, 1956, 72, 7-13.

Abstract : Grafts of cuttings of Delikates variety of eggplants and Marglob variety of tomatoes, and the seed progeny of the graftings were objects of investigation. In the leaves of the graftings of tomatoes as well as of eggplant deviations (particularly strong during the period of fruit ripening) towards the uncultivated plants were noted, accompanied (considerably greater in the primary phases of development) by a drop in the level of content of protein N,

Card 1/2

USSR / Plant Physiology. Respiration and Metabolism.

I

Abs Jour : Ref Zhur - Biol., No 9, 1953, No 38894

Author : ~~Semenenko, G. I.~~  
Inst : University of Kharkov  
Title : On the Transformation of Nucleic Acids in Germinating and  
Maturing Seeds.

Orig Pub : Fiziol. Rasteniy, 1957, No 4, 332-337

Abstract : In the seeds of the Narodnaya variety of summer wheat, Kharkov oats No. 596, and Uladovskiy peas No. 208, in the process of maturation and germination, the content of nucleic acids (I) was determined by the Schmidt-Tanhauser method and the ribonuclease activity (II). In the germination of seeds in darkness, the quantity I (in 100 plants) decreased in the endosperm while it increased in the sprouts. Biosynthesis I in the sprouts proceeded not only with regard to the products of their hydrolysis in the endosperm but also with regard to the other substances of the seeds.

17(3)

AUTHOR:

Semenenko, G. I.

SOV/20-124-5-54/62

TITLE:

On the Predecessors of the Purines of Nucleic Acids in Higher Plants (O predshestvennikakh purinov nukleinovykh kislot u vysshikh rasteniy)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959. Vol 124, Nr 5, pp 1150-1153 (USSR)

ABSTRACT:

As is known, higher and lower organisms (except some bacteria) synthesize nucleic acids from simple substances and need no introduction of organic components which form the components of the ribo- and desoxyribonucleic acid (RNA and DNA). By using marked atoms (Refs 1-7, and others) it was found that CO<sub>2</sub>, glycolic, formic, ammonium citrate, and some other substances may occur as predecessors of purines of the nucleic acids in the tissues of many animals and microorganisms. However, many organisms can be used for the utilization of exogenous purines for the synthesis of nucleic acids. They transform exogenous adenine into guanine of nucleic acids and exogenous guanine into nucleic acid adenine. In this connection the degree of mutual transformation is

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On the Predecessors of the Purines of Nucleic Acids  
in Higher Plants

SOV/20-124-5-54/62

unequal in individual species (Refs 3-7). In higher plants all these important problems are still very insufficiently investigated. In the present paper the author investigated the purine accumulation in wheat and corn germs in dependence on the nitrogen source in the nutrient medium, moreover, he investigated the inclusion of purines of the nutrient medium into nucleic acids and finally the inclusion of  $C^{14}$  of the glycocoll into the purines of nucleic acids during the germination and ripening of wheat and oat germs. Table 1 shows the purine content in wheat and corn germs in dependence on the nitrogen forms of the nutrient medium. The author draws the following conclusions from the results of experiments: The purines introduced into the nutritive solution are absorbed by the wheat and corn germs. The wheat germs, however, do not utilize the introduced purines in the normal way of nucleic acid synthesis. The presence of glycocoll in the nutrient medium as the only source of nitrogen leads to purine synthesis without admission of light. The glycocoll marked with  $C^{14}$  is included in the adenine and guanine of the RNA of wheat germs and in the purines of the

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On the Predecessors of the Purines of Nucleic Acids      SOV/20-124-5-54/62  
in Higher Plants

nucleic acids of ripening wheat and oat seeds. Apparently, glycocoll is one of the important predecessors in the synthesis of nucleic acid purines in higher plants as is the case in tissues of animals and microorganisms. There are 2 tables and 13 references, 7 of which are Soviet.

ASSOCIATION:    Khar'kovskiy gosudarstvennyy universitet im. A. M. Gor'kogo  
                    (Khar'kov State University imeni A. M. Gor'kiy)

PRESENTED:      October 14, 1958, by A. I. Operin, Academician

SUBMITTED:      February 27, 1958

Card 3/3

SEMENENKO, G.I. [Semenenko, H.I.]

Role of light in the biosynthesis of nucleic acids in the green shoots of wheat, corn, and peas. Ukr. biokhim. zhur. 33 no.3:340-347 '61. (MIRA 14:6)

1. Kafedra fiziologii rasteniy Khar'kovskogo gosudarstvennogo universiteta.

(PLANTS, EFFECT OF LIGHT ON)  
(NUCLEIC ACIDS)

SEMENENKO, G.I. [Semenenko, H.I.]; KRASIL'NIKOVA, L.A. [Krasyl'nikova, L.O.]  
KORZHENKO, Yu.P.

Amount of nucleic acids and some other phosphorus compounds  
in early and late varieties of spring wheat. Ukr. biokhim.  
zhur. 34 no.2:275-285 '62 (MIRA 16:11)

1. Department of Plant Physiology of the A.M.Gorky State Uni-  
versity of Kharkov.

\*

SIL'NIKOV, Georgiy Il'ich; SUSHKIN, G.K., prof., otv. red.;  
VAINBERG, E.A., red.

[Biochemistry of nucleic acids metabolism in higher  
plants] K bioximii obmena nukleinovyykh kislot u vys-  
shikh rastenii. Khar'kov, Izd-vo Khar'kovskogo univ.,  
1964. 174 p. (MR. 18:1)



SEMENENKO, G.I. [Semenenko, H.I.]; KRASIL'NIKOVA, L.A. [Krasyl'nykova,  
L.O.]

Incorporation of P<sup>32</sup> in nucleic acids and other phosphorus-  
containing compounds of winter wheat during the fall-winter  
period. Dop. AN URSR no.10:1371-1375 '62. (MIRA 18:4)

1. Khar'kovskiy gosudarstvennyy universitet.

94-13-7-2/25

AUTHORS: Murav'yev, V. P., Candidate of Technical Science and  
Semenenko, G. M., Engineer

TITLE: The Effectiveness of Installing Low-voltage Power  
Factor Correction Capacitors in Mining Networks  
(Ob effektivnosti ustanovki nizkovol'tnykh kosinusnykh  
kondensatorov v shakhtnykh setyakh)

PERIODICAL: Promyshlennaya Energetika, 1958, Vol 13, Nr 7,  
pp 4-5 (USSR)

ABSTRACT: The operating conditions of power factor correction capacitors in mine power networks are quite different from those in other industries because all the electrical equipment has to be moved as the working face advances. Because of this the usual methods of determining the economics of installation of power factor correction capacitors do not apply. An equation is then given for the additional annual expenditure when capacitors are installed in a distribution point under a long wall. The equation includes an allowance for moving the capacitors. A general expression is given for the reduced cost of power losses and for the cost of moving transformer substations in terms of permitted voltage drop. It is shown that the advantage

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94-13-7-2/25

The Effectiveness of Installing Low-voltage Power Factor  
Correction Capacitors in Mining Networks

of installing capacitors at the distribution point depends on a number of factors and in particular on the conditions that govern the length of armoured cable, which affects the frequency with which it is necessary to move the transformer. A numerical example is worked out to determine the reduction in annual cost when the distance between substations is governed by the voltage drop. The installation of capacitors at the distribution point is particularly advantageous when the frequency of moving transformer substations is limited by permissible voltage drop and when transformer substations are not mobile. The advantages of using capacitors are less when the transformers have to be moved more often because of the way the mine is worked. In such a case capacitors are most likely to be advantageous when used in packaged mobile distribution points. There are 2 Soviet references.

- Card 2/2
1. Capacitors ~ Effectiveness
  2. Electrical networks ~ Equipment
  3. Mines ~ Equipment

EYDEL'MAN, Ye.Ya.; NOVITSKIY, P.L.; SEMENENKO, G.P.

Heating of coal in an apparatus with a directed flow of the suspended  
beds of coal. Koks i khim. no.4:13-15 '60. (MIRA 13:6)

1. Donetskii industrial'nyy institut (for Eydell'man and Novitskiy).
2. Stalinskiy koksokhimicheskiy zavod (for Semenenko)  
(Coal preparation)

SEMENKO, I.F.; MIKHAYLICHENKO, M.K.; SEMEMK' K.A.

Abstracts. Sov. med. 28 no.9:142-143 S '65. (MIRA 18:9)

1. Kafedra fakul'tetskoy terapii Luganskogo meditsinskogo instituta, Luganskaya oblastnaya bol'nitsa i 1-ya Luganskaya gorodskaya bol'nitsa.

L 00083-66

ACCESSION NR: AR5013510

UF: 0271/65/000/004/A032/A032  
61-52:621.374:531.761

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika. Svodnyy tom, Abs. 4A205

AUTHOR: Semenenko, I. G.

TITLE: Photodiode timer 10

CITED SOURCE: Sb. Ustroystva i elementy prom. telemekhan. Kiyev, 1964, 99-101

TOPIC TAGS: timer, photodiode timer

TRANSLATION: A photodiode timer is described which consists of a synchronous motor or a clockwork rotating the minute and hour code disks placed between the photodiodes and a light source. No timer malfunction occurs on a supply failure. The construction and operation of the coder in connection with the complicated transition from 59 to 00 minutes are explained. The photodiode operation stability is ensured by challenging them with special pulses. Figs. 2.

SUB CODE: EC

ENCL: 00

Card 1/1

S/137/61/000/011/020/123  
A060/A101

AUTHOR: Semenenko, I. I.

TITLE: Combustion of high-sulfur mazut with its gasification in the cap of the open-hearth furnace in the course of smelting high-quality steel

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 11, 1961, 30, abstract 11V191 (V sb.: "Novoye v teorii i praktike proi.-va martenovsk. stali". Moscow, Metallurgizdat, 1961, 330 - 331. Discuss. 332 - 334)

TEXT: The author describes a new method proposed by the Ural Polytechnic Institute and the Metallurgical Combine imeni Serov for the combustion of high-sulfur mazut with its preliminary gasification. Without greatly modifying the open-hearth furnace, one feeds air at medium pressure into the vertical channel along the former gas tract. The mazut, atomized by compressed air is fed along the axis of the channel through an opening in the caisson housing. As result of the partial combustion in the vertical channel, the mazut is gasified and is fed into the furnace in the form of mazut gas with caloric content (without taking into account the soot C) of 1,250 kcal/nm<sup>3</sup> and at a temperature of 1,500°C. At an excess-air coefficient of 0.35 - 0.40 the mazut gas has the chemical composition

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S/137/61/000/011/020/123  
A060/A101

Combustion of high-sulfur mazut with...

(in %): CH<sub>4</sub> 2.0, H<sub>2</sub> 19.0, CO 15, CH 1.0, O<sub>2</sub> 0.8, CO<sub>2</sub> 3.0. Its heat of combustion is 1,250 kcal/nm<sup>3</sup>. The highest content of sooty C (160 - 180 g/nm<sup>3</sup>) is obtained at the air-excess coefficient of 0.45. The maximum burner temperature is 1,950 - 2,000°C. To raise the velocity of gas outflow, the output section of the gas runway of the furnace was reduced down to 0.28 m<sup>2</sup> and the injection of combustion products in the gas runway was carried out. At the feed cap the same injector partially feeds the heated air into the gas runway but mainly it serves as a trap protecting the escape of mazut gas through the injection apparatus in the caisson housing. Balance smeltings have shown that with the utilization of sulfurous mazut (> 2% S) the quantity of S passed over into the metal constitutes only 10 - 14% of its total content in the slag and the metal. This is explained by the predominant formation of a comparatively inactive compound of S - sulfurous anhydride. The mid-smelting rates of sulfur elimination in the process of lapping are 0.009 - 0.010% S per hour. One year's operation of the furnaces has demonstrated that with the utilization of sulfurous mazut it is possible to carry out smelting of charging ingots for acid furnaces with S content in the finished metal of 0.03 - 0.015%; the hourly productivity was raised by 6%.

Yu. Nechkin

[Abstracter's note: Complete translation]

Card 2/2



YANCHUK, A.N.; SEMENENKO, I.K.; MOISEYENKO, A.D., inzh.-mekhanik  
(st.NIKITovka, Donetskoy dorogi)

Letters to the editor. Put' i put.khoz. no.7:45 '62. (MIRA 15:7)

1. Mostovoy master st. Orsha, Belorusskoy dorogi (for Yanchuk).
2. Starshiy dorozhnyy master, st. Sambor, L'vovskoy dorogi (for Semenenko).

(Railroads--Track)

SEMENENKO, I.M.

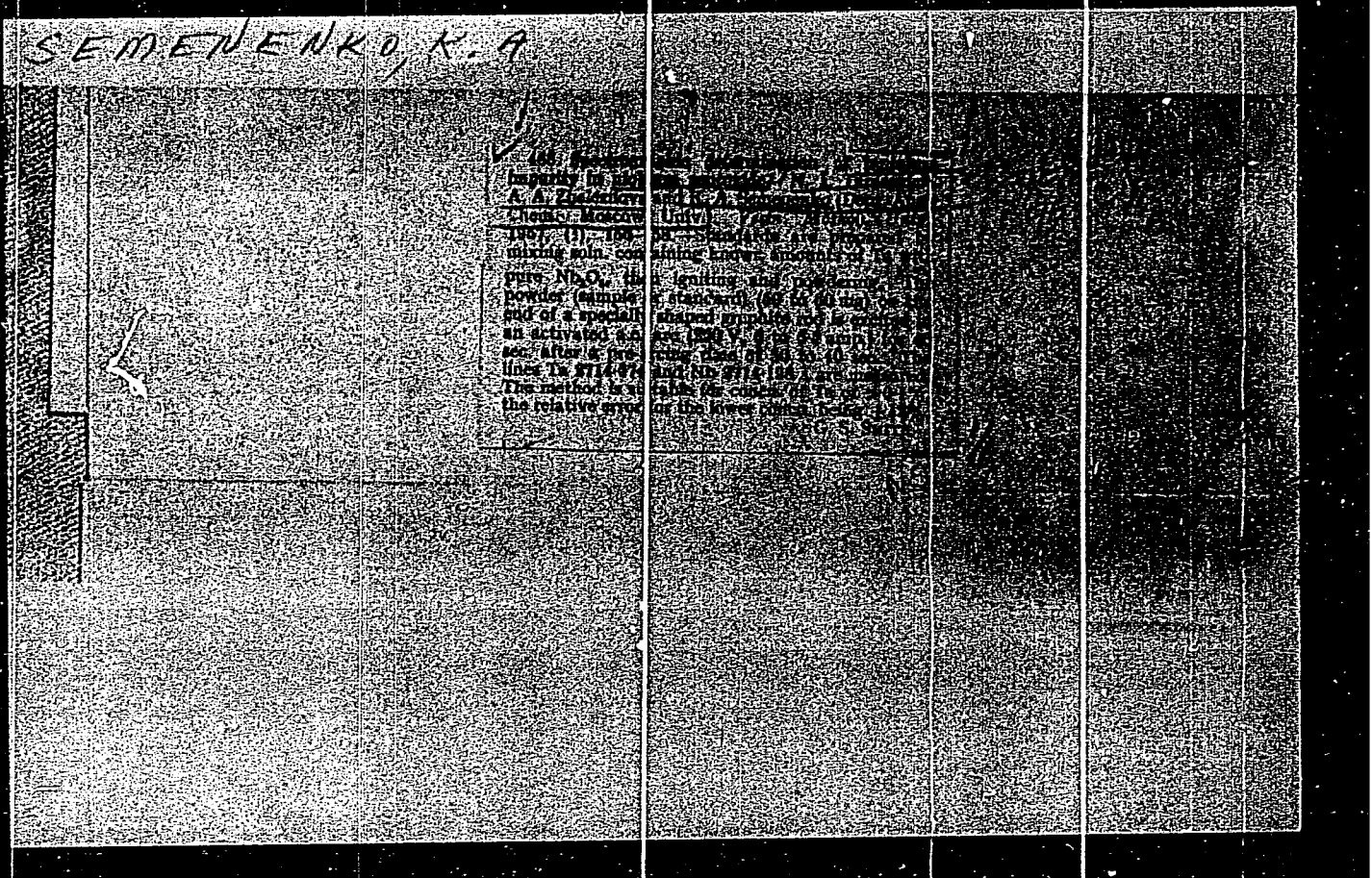
~~Preparing the earthen roadbed during the fall and winter period.~~  
Avt.dor. 17 no.2:28 S-O '54. (MIRA 8:4)  
(Road construction)

SPITSYN, V.I., akad., red.; KOLLI, I.D., kand. khim. nauk, red.; ZHELEGOV-  
SKAYA, N., kand. khim. nauk [translator]; MEN'KOVA, N., [translator];  
PATSUKOVA, N., kand.khim. nauk [translator]; PASHINKIN, A., kand.  
khim. nauk [translator]; PIKAEV, A., kand. khim. nauk [translator];  
SEMEENKO, K., kand. khim. nauk [translator]; TUROVA, N. [translator];  
MANUYLOVA, G.M., red.; RYBKINA, V.P., tekhn. red.

[Inorganic polymers] Neorganicheskie polimery. Moskva, Izd-vo inostr.  
lit-ry, 1961. 470 p. Translations from foreign journals.

(MIRA 14:13)

(Polymers)



SOV/156-58-4-22/49

AUTHORS: Tarasevich, N. I., Semenenko, K. A., Semenenko, K. N.

TITLE: The Radiographic Investigation of the Products of Chemical Reactions in Spectroscopic Determinations of Niobium (Rentgenograficheskoye izucheniye produktov khimicheskikh reaktsiy pri spektral'nom opredelenii niobiya)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 4, pp 700-705 (USSR)

ABSTRACT: In the present paper the products formed on the carbon electrode in the spectrum analysis of niobium determination were radiographically investigated. The following samples were investigated: I. Nb+C; II. Si+C; III. Nb+Si+C; IV. Nb<sub>2</sub>O<sub>5</sub>+C; V. Nb<sub>2</sub>O<sub>5</sub>+Si+C; VI. Nb<sub>2</sub>O<sub>5</sub>+SiO<sub>2</sub>+C. The radiograms of the products were taken. The radiographic investigation shows that in the interaction of metallic niobium with carbon only niobium carbide is formed. In the interaction between silicon and carbon SiC is formed. The interaction between carbon and a mixture of Nb and Si takes a complex way, however. The radiographic analysis shows that in the reaction products the

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The Radiographic Investigation of the Products of Chemical Reactions in  
Spectroscopic Determinations of Niobium

following phases are formed: cubic NbC and tetragonal  $\beta$ -Nb<sub>5</sub>Si<sub>3</sub>. The interaction of Nb<sub>2</sub>O<sub>5</sub> with the carbon electrode shows only a modification of Nb<sub>2</sub>O<sub>5</sub> with small impurities of NbO<sub>2</sub>. Lower niobium oxides were not determined. In the interaction between niobium pentoxide Nb<sub>2</sub>O<sub>5</sub> and elementary silicon with carbon NbO<sub>2</sub> and a phase difficultly identified are formed. The interaction between niobium pentoxide Nb<sub>2</sub>O<sub>5</sub> and silicon dioxide with carbon leads to the formation of NbC<sub>2</sub> and niobium pentoxide. In the presence of elementary silicon and SiO<sub>2</sub> niobium dioxide is formed on the carbon crater during the spectroscopic determination of niobium. The excitation source and excitation conditions as well as the amperage do practically not exert any influence upon the composition of niobium phases in the carbon crater. There are 1 figure, 4 tables, and 6 references, 4 of which are Soviet.

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SOV/156-58-4-22/49

The Radiographic Investigation of the Products of Chemical Reactions in  
Spectroscopic Determinations of Niobium

ASSOCIATION: Kafedra analiticheskoy khimii Moskovskogo gosudarstvennogo  
universiteta im. M. V. Lomonosova (Chair of Analytical  
Chemistry at the Moscow State University imeni M. V. Lomonosov)

SUBMITTED: April 15, 1958

Card 3/3

TARASEVICH, N.I., SEMENENKO, K.A., MELEKHINA, N.F.

Spectral determination of niobium and tantalum impurities in  
titanium. Vest. Mosk. un. Ser. 2: khim. 15 no.2:64-68 Mr-Apr '60.  
(MIRA 13:6)

1. Kafedra analiticheskoy khimii Moskovskogo universiteta.  
(Niobium--Spectra) (Tantalum--Spectra) (Titanium--Analysis)



S/189/60/000/003/008/013/XX  
B003/B067AUTHORS: Tarasevich, N. I., Semenenko, K. A., Semenenko, K. N.TITLE: X-Ray Photographic Method of Determining the Products of  
Chemical Reactions in the Spectral Determination of Tantalum ✓PERIODICAL: Vestnik Moskovskogo universiteta. Seriya 2, khimiya, 1960, Vol. 15,  
No. 3, pp. 37-39

TEXT: The authors studied the reaction products which were formed from tantalum pentoxide in the electric arc in the crater of the carbon electrode ( $Ta_2O_5$ ). The investigation method applied is described in an earlier paper. (Ref. 1). The very finely powdered  $Ta_2O_5$  was filled into the electrode crater and closed with a cover of coal (provided with an opening for the gases). In all experiments the reaction conditions in the arc were the same. The X-ray powder patterns of the reaction products were taken with РКД (RKD) cameras. A ЕСБ (BSV) tube served as radiation source (copper electrode). The product formed from  $Ta_2O_5$  (under the

 ✓

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X-Ray Photographic Method of Determining the S/189/60/000/003/008/013/XX  
Products of Chemical Reactions in the Spectral B003/B067  
Determination of Tantalum

action of electrode carbon) mainly consists of TaO<sub>2</sub> (tetragonal phase; parameter: a = 4.73±0.01 Å, c = 3.05±0.01 Å). Furthermore it contains nonreacted Ta<sub>2</sub>O<sub>5</sub> in two modifications (α-modification with tetragonal lattice, a = 3.80 Å, c = 35.60 Å, as well as a modification observed for the first time by Yu. P. Simanov (Ref. 4) and a Ta - C - O triple phase. No data can be given concerning the presence of TaO since its reflections were superimposed by reflections of oxides of higher valence. An addition of SiO<sub>2</sub> to Ta<sub>2</sub>O<sub>5</sub> hardly influences the reduction in the arc. The presence of Si in the reaction mixture promotes the reduction of Ta<sub>2</sub>O<sub>5</sub> (the reaction product consists of TaO, Ta-C-Si, Ta-C-O-, Ta-Si-O triple phases as well as of TaC and SiC). In a table the experimentally determined values of X-ray analysis are compared with the published values. There are 1 table and 5 references: 4 Soviet and 1 Danish. ✓

ASSOCIATION: Moskovskiy universitet, Kafedra analiticheskoy khimii  
(Moscow University, Chair of Analytical Chemistry)

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SEMENENKO, K.A.; TARASEVICH, N.I.

Effect of phosphomolybdate on the spectral determination  
of niobium and tantalum. Zhur. anal. khim. 18 no.1:88-92  
Ja '63. (MIRA 16:4)

1. M.V. Lomonosov Moscow State University.  
(Niobium—Spectra) (Tantalum—Spectra)  
(Phosphomolybdates)

L 51980-65 EWT(m)/EPT(n)-2/EWP(+)/EWP(b)

Pu-4 IJP(e) JD/JG

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BFI

TITLE: Ammonium phosphomolybdate as a collector for concentrating tungsten, niobium and tantalum in molybdenum and other materials

SOURCE: AN SSSR. Komissiya po analiticheskoj khimii. Trudy, v. 15, 1965. Metody kontsentrirvaniya veshchestv v analiticheskoj khimii (Methods of concentrating substances in analytical chemistry), 263-270

TOPIC TAGS: ammonium phosphomolybdate, molybdenum analysis, ore analysis, tungsten concentration, niobium concentration, tantalum concentration, coprecipitation, vacuum distillation

ABSTRACT: The conditions of coprecipitation of tungsten (in concentrations of 10<sup>-2</sup> to 10<sup>-4</sup>%) with ammonium phosphomolybdate were investigated, viz., influence of the concentration and nature of the acid, amount of precipitant (0.2% solution of disubstituted ammonium phosphate), temperature, time of standing of the precipitates, and presence of certain organic substances. It was found that coprecipitation should be carried out in 1 N HCl at room temperature, and that ammonium phosphomolybdate precipitates about 90% of the

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