

POPDIMITROV, K., st. nauchen sutrudnik; KIROV, Ljubomir Bozhinov

Application of Pilatov's tissue therapy in Bulgaria using tissue
in injectable form. Farmatsia 4 no.2:37-39 Mr-Ap '54.

1. RNIFI (for Popdimitrov)
(TISSUE THERAPY,
*inject. technic)

POPEA, F.; SPACU, P.

Analytic chemistry of zirconium; a new gravimetric method for the determination of zirconium. p. 45.

ANALELE. SERIA STINTELOR NATURII. Bucuresti, Rumania.
Vol. 7, no. 17, 1958

Monthly list of European Accessions (EEAI) LC, Vol. 8, no. 8, Aug. 1959

Uncl.

CA

7

A new microchemical reaction for the detection of silver
Petru Spacu and Florica Doga (Univ. Bucharest, Rom-
mania). *Acad. Rep. Populare Romane, Bul. Stiint.*, A, 1,
733-7 (1949) (French summary). - By treatment of an aq.
soln. of Ag salt with acridine and an excess of KI a reddish
brown ppt. is formed which is insol. in org. solvents such as
EtOH, Et₂O, Me₂CO, and CHCl₃. The reaction takes
place in AcOH, H₂SO₄, and neutral solns. HNO₃ destroys
the ppt., whereas HCl does not affect it. Hg, Bi, Pb, Cu,
Cd, Te, and other elements which form insol. iodides or
insol. complexes with acridine and KI interfere. The
compn. of the complex seems to be: 3 Ag·C₁₁H₈N₃.
As little as 0.4 γ Ag is detectable. Gerhard Aullinger

Popea, Florica

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Gravimetric determination of bismuth (C. Spacu and Florica Popea (C. I. Pacheon Univ., Bucharest). *Acad. rep. Romania. Studii cercetari chim.* 3, 175-81 (1955). (French summary).—Bi is pptd as $trans-[Co en_2 Cl_2]_2 [BiCl_4]$, a stable cryst. complex. To the ice-cold, slightly acidic (HCl) soln. contg. 4-50 mg. Bi, add 0.3 g. NH_4Cl and 1 ml. of an EtOH soln. of 0.4-0.5 g. $trans-[Co en_2 Cl_2]Cl$ (1) in dil. HCl (1:4). The vol. of the mixt. should not exceed 75 ml. Agitate vigorously for 5 min.; let settle for 30-45 min.; filter out the green ppt. with a porous filter crucible; wash with small portions of a soln. contg. 1 (0.1 g.), H_2O (50 ml.), EtOH (49 ml.) and HCl (d. 1.19, 1 ml.); wash with 90% EtOH, abs. EtOH, and abs. Et_2O ; and dry *in vacuo* to const. wt. Na, K, Ca, NH₄, sulfate and acetate ions do not interfere although the presence of metals from the 2nd group does. The error of the method is less than $\pm 0.5\%$ and decreases at the higher bi concns.

Chem

12

Gary Gerard

RM mk

POPEA, FLORICA

27
 The chloriodates—two new classes of compounds—the dichlorodode-metal amines and the tetrachlorodode-metal amines. *J. Spary and Florica Popea, Rev. chim., Acad. rep. populare Roumaine*, No. 1, 127-32(1958) (in French).—Complex dichloriodates were prepd. by the reaction of NH_4ICl_2 and Co amines in aq. or alc. HCl solns. Among those prepd. were *trans*- $[CoCl_2(NH_3)_4]ICl_2$, *trans*- $[CoCl_2(en)]ICl_2$, *trans*- $[Co(NH_3)_2(DH)_2]ICl_2$, *cis*- $[Co(en)Cl_2]ICl_2$, *cis*- $[Co(py)_2(DH)_2]ICl_2$, and $[Co(py)_2Cl_2]ICl_2$, where DH is dimethylglyoxime. All of these compds. have the same color as does the metal cation, are cryst., and are more stable than the simple salts. When solid NH_4ICl_2 was added to Co amine in aq. HCl soln. $[CoCl_2(en)]ICl_2 \cdot 2HCl$ was formed which when mixed in an agate mortar with NH_4ICl_2 in H_2O gave the mono HCl salt. This was converted to the anhyd. salt by washing with an alc. Et_2O mixt. The iodates and chlorides of $[Co(NH_3)_4(IO_3)_2]$, $[Co(NH_3)_4(ICH_2H_2O)_2]^{++}$ and $[Cr(NH_3)_4(IO_3)_2]$, $[Cr(NH_3)_4(ICH_2H_2O)_2]^{++}$ were formed by the addn. of NH_4ICl_2 to the respective ammine, are yellow and the Co compd. stable to P_2O_5 at 80° *in vacuo*. If the dichloriodate is treated with Cl_2 , the corresponding $(ICl_2)^-$ compd. can be formed. The substances are less brilliantly colored than are the corresponding ICl_2^- compds. but are unaffected by weak acids, $NaOH$, and NH_4OH at room temp., are insol. in Et_2O and sol. in abs. alc. $[Co(NH_3)_2(DH)_2]ICl_2 \cdot 4H_2O$ loses the H_2O after 24 hrs. in alc. H_2O (ICl_2) and the HCl deriv. of 2-aminopyridine were prepd. by the reaction of the respective ammines with NH_4ICl_2 and Cl_2 at 0° , and are yellow unstable cryst. A. Löffler

Chlor

27
4

PM
1/15/58

Country : Rumania E-2
Category : Analytical Chemistry - Analysis of
Inorganic Substances
Abs. Jour. : Ref Zhur-Khimiya, No 6, 1959 19090
Author : Popea, F.; Badiceanu, L.
Institut. :
Title : Direct Colorimetric Determination of Trace-
Amounts of Silver in Soil in the Presence of
Other Cathions.
Orig. Pub. : Rev. Chim., 1958, 9, No 6, 323-324

Abstract : It was found that on interaction of Ag^+ with diphenylthiocarbazone (I) in acid medium, there is formed a precipitate which, after dissolution in CCl_4 , is suitable for colorimetric determination of trace-amounts of Ag. The interfering elements (Fe, Cu, Zn, Pb) are masked by addition of Complexon III (II) at pH 4-5. It was ascertained that the best procedure for extracting Ag from the soil is fusion with KHSO_4 . In determination of Ag, 1 g of the soil being analyzed is fused with 8 g KHSO_4 , after cooling the melt is dissolved in water, boiled 10-15 minutes, and the solution with the sediment is diluted with water to a definite volume.

Card: 1/3

E-14

Country : Rumania
Category : Analytical Chemistry - Analysis of
Inorganic Substances
Abs. Jour. : Ref Zhur-Khimiya, No 6, 1959

E-2

19090

Author :
Institut. :
Title :

Orig Pub. :

Abstract : An aliquot portion of the resulting mixture is placed in a separatory funnel, and combined with buffer solution (80 ml 10% solution CH_3COONa + 10 ml CH_3COOH , 1:4), a solution of II (2 g II + 25 ml water), and 1 ml 0.001% solution of I in CCl_4 , stirred for 3 minutes, and the CCl_4 layer is separated. The extraction is repeated 2-3 times, using smaller amounts of solution of I (0.2 ml). The thus obtained solution of Ag-diphenylthiocarbazonate in CCl_4 is washed 2-3 times with 20-25 ml ammonia water (1:1000) containing 0.5-1 g II (to remove excess I), transferred into a cylinder, diluted with CCl_4 to a definite volume, kept for

Card: 2/3

~~FLORICA POPEA~~ FLORICA

Distr: AERC

The analytical chemistry of zirconium. A new gravimetric method for the determination of zirconium. P. Spacu and Florica Popen. *Analele Univ. "C. I. Parhon" Bucuresti, Ser. Chim., nat.* 1958, No. 17, 45-53. — A new gravimetric method for the detn. of Zr in HNO_3 (other acids do not interfere) is given. The reagent is the Na or NH_4 salt of mercaptobenzothiazole which is added until the color of bromothymol appears (pH = 6-7.6). The ppt. can immediately be filtered and washed with water. As the ppt. is discolored by small amts. of mercaptobenzothiazole and $Zr(OH)_2$, it must be transformed into ZrO_2 and then weighed. This method is easy to perform, and differences found are not more than 0.0002 g. Alk., ammonium, Sr, and Mg salts do not interfere with the detn. of Zr. C. Heitner-Wirguly

POPEA, Florica; MAVRODIN, Maria; IONESCU, Elena; MASTIHARD, Sylvia

Physicochemical study of the uranyl nitrate-mucic acid systems.
Rev chimie Roum 10 no.1:35-38 Ja '65.

1. Section of Lanthanide and Actinide Chemistry of the Inorganic
Chemistry Research Center, Rumanian Academy, 29 Splaiul Independen-
dentei, Bucharest. Submitted July 15, 1964.

SPAGU, P.; POPRA, Florica; TOANEANU, Constanta

Spectrophotometric and conductometric study of the UO_2^{2+} - CH_2ClCOO^- ; UO_2^{2+} - $CHCl_2COO^-$; UO_2^{2+} - CCl_3COO^- system. *Revista de chimie Roum* 10 no.1:39-46 Ja '65.

Spectrophotometric and conductometric study of the UO_2^{2+} - CH_2BrCOO^- system. *Ibid.*:47-51

Spectrophotometric and conductometric study of the UO_2^{2+} - CH_2JCOO^- system. *Ibid.*:53-57

1. Section of Lanthanide and Actinide Chemistry of the Inorganic Chemistry Research Center, Romanian Academy, (9 Splaiul Independentei), Bucharest. Submitted July 15, 1964.

SPACU, P.; POPEA, Florica; IERADATU, C.; TOGHIANU, Constanta

Halogen inductive effect on the stability in watery solution of the uranyl ion connections with some halogen derivatives of the acetic acid. Rev chimie Roum 10 no.1:59-65 Ja '65.

1. Section of the Lanthanide and Actinide Chemistry of the Inorganic Chemistry Research Center, Rumanian Academy, 89 Splaiul Independentei, Bucharest. Submitted July 15, 1964.

SPACU, P.; POPEA, Florica; TOHANEANU, Constanta

Spectrophotometric and conductometric study on the UO_2^2 - CH_2ClCOO^- , UO_2^2 - CCl_3COO^- systems. Studii cerc chim 1/ 3.1: 39-46 Jan '64.

Spectrophotometric and conductometric study of the UO_2^2 - CH_2BrCOO^- system. Ibid.:47-51

Spectrophotometric and conductometric study of the UO_2^2 - CH_2ICOO^- system. Ibid.:53-58

1. Section of Lanthanum and Actinide Chemistry of the Inorganic Chemistry Research Center, Rumanian Academy, 89 Splaiul Independentei, Bucharest. Submitted July 15, 1964.

POPEA, Florica; MAVRODIN, Maria; ANTONESCU, Elena; PLICSTINARU, Silvia

Physicochemical study of the uranyl-mucic acid nitrogenous system. Studii cerc chim 14 no.1:35-38 Ja '65.

1. Section of Lanthanum and Actinide Chemistry of the Inorganic Chemistry Research Center, Rumanian Academy, 89 Splaiul Independentei, Bucharest. Submitted July 15, 1964.

SPACU, P.; POPEA, Florica; LEPADATU, C.; TOHANEANU, Constanta

Halogen inductive effect on the stability of the uranyl ion compounds with some halogenated derivatives of acetic acid in aqueous solution. Studii cerc chim 14 no.1:59-65 Ja '65.

1. Section of Lanthanum and Actinide Chemistry of the Inorganic Chemistry Research Center, Rumanian Academy, 89 Splaiul Independentei, Bucharest. Submitted July 15, 1964.

SPACU, P.; POPEA, Florica

Direct spectrophotometric determination of uranium in the presence of yttrium, cerium, and thorium. Studii cerc chim 11 no.2: 261-265 '63.

1. Sectia de chimie anorganica a Centrului de cercetari chimice al Academiei R.P.R., Bucuresti. 2. Membru Corespondent al Academiei R.P.R. (for Spacu).

POPEA, Florica; JURASCU, Caterina

Determining traces of antimony in the polycrystalline sulfides and in soils. Studii cerc chimie 10 no.2:211-218 '62.

1. Laboratorul de geochimie al Interprinderii de prospectiun si laboratoare, Bucuresti.

POPEA, Florica

"Quantitative analytic chemistry" by Q. ~~Chif~~. Reviewed by Florica
Popea. Studii ~~de~~ chim 10 no.1:144 '62.

POPEA, Florica; GUTMAN, Madeleine

Determination of cadmium traces in polymethylic sulfides and in soils, in the presence of other cations. Studii cerc chim 9 no.4: 673-680 '61.

1. Laboratorul de geochimie al Intreprinderii de prospectiuni si laboratoare, Bucuresti.

SPACU, Petru; POPEA, Florica

Spectrophotometric determination of uranium. Studii cerc chim 9
no.1:139-147 '61. (EEAI 10:9)

1. Centrul de cercetari chimice al Academiei R.P.R., Bucuresti.
2. Comitetul de redactie, STUDII SI CERCETARI DE CHIMIE(for Spacu).

(Spectrophotometry) (Uranium)

POPEA, F.

✓ A new accurate gravimetric method for the rapid determination of bismuth. G. Spacu and Florica Popea. *Acad. rep. populare Romine Studii cercetari chim.* 3; 175-81(1955); *Chem. Zentr.* 129, 2234(1958).—The detn. of Bi depends on the pptn. after reaction with the complex *trans*-[Co en₂Cl₂]-Cl (I) (*Bud. soc. (pina) cluj.* 1931, 473) which is formed on treatment with CoCl₂ and ethylenediamine and subsequent acids. Bi (4-50 mg.) in soln. is treated with 1 ml. HCl (d. = 1.19), cooled in an ice bath, and 0.3 g. NH₄Cl, 1 ml. EtOH, and 0.4-0.5 g. I in HCl are added. The mixt. is stirred, and the green complex, [Co en₂Cl₂]₂[BiCl₄], which ppts., is filtered, washed, dried, and weighed. The limit of accuracy is 0.0001 g. Na⁺, K⁺, NH₄⁺, Ca⁺⁺, Cl⁻, AcO⁻, and SO₄⁻⁻ do not interfere. Henry M. Kochlin—

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A20
1-21-50

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POPEANGA, V., prof. (Arad); SPATARU, I., prof. (Timisoara)

Concern on increasing the efficiency of geography lessons.
Natura Geografie 17 no.2:46-51 Mr-Apr '65.

POPEANGA, V., prof. (Arad)

Forming of geographical conceptions in the 8-year school. Natura
Geografie 15 no.5:59-63 S-0 '63.

MOLDOVAN, Silvestru; CRACIUN, Leon, ing.; GURSA, Victor, ing.; POPEANOS,
Miroea, ing.

Automatic device for perforating textile tubes of pastebored.
Industria usocara 11 no.3:154-155 Hx'64

Country : USSR
Category : General Biology. B
Individual Development. Embryonic Development.
Abs. Jour : RZhBiol., No. 3, 1959, No. 9677
Author : Gorbacheva, A. P.; Popchina, P. S.
Institut. : -
Title : Age-Determined Changes of Aminoacid Content
in Embryos of the Pig.
Orig. Pub. : Zhivotnovodstvo, 1958, No 5, 82-85
Abstract : The aminoacid composition of embryos at
various development stages was studied in pigs.
Young sows of the large white breed farrowing
for the first time were used in the experiment.
Diaminoacids were determined by ionophoresis
and dicarbonic aminoacids by paper chromato-
graphy. The embryos' weight increases most in-
tensely during the first 60 days. As the em-
bryo grows, its water content decreases and the
amount of ashes increases. Quantitative in-

Card: 1/2

28

POPEK, Antonin

Personal initiative. Zel čop tech 12 no.10:271 '64.

1. Head of the Railroad Operations Section, Brno.

POPEK, K.; DLUHOS, M.; MULLER, E.; KUCERA, K.; BAKALA, F.

Temporal arteritis. Lek.listy 5 no.9:241-246 1 My '50.(CLML 19:2)

1. Of the Clinic for Nervous Diseases (Head -- Prof. Karel Popek, M.D.) and of the Patho-Anatomical Institute (Head -- Prof. Vaclav Neuman, M.D.), Masaryk University, Brno, of the Neurological Department and Central Laboratory and Prosection Department (Head -- Head Physician, Docent Kamil Kucera, M.D.), Regional Hospital in Gottwald.

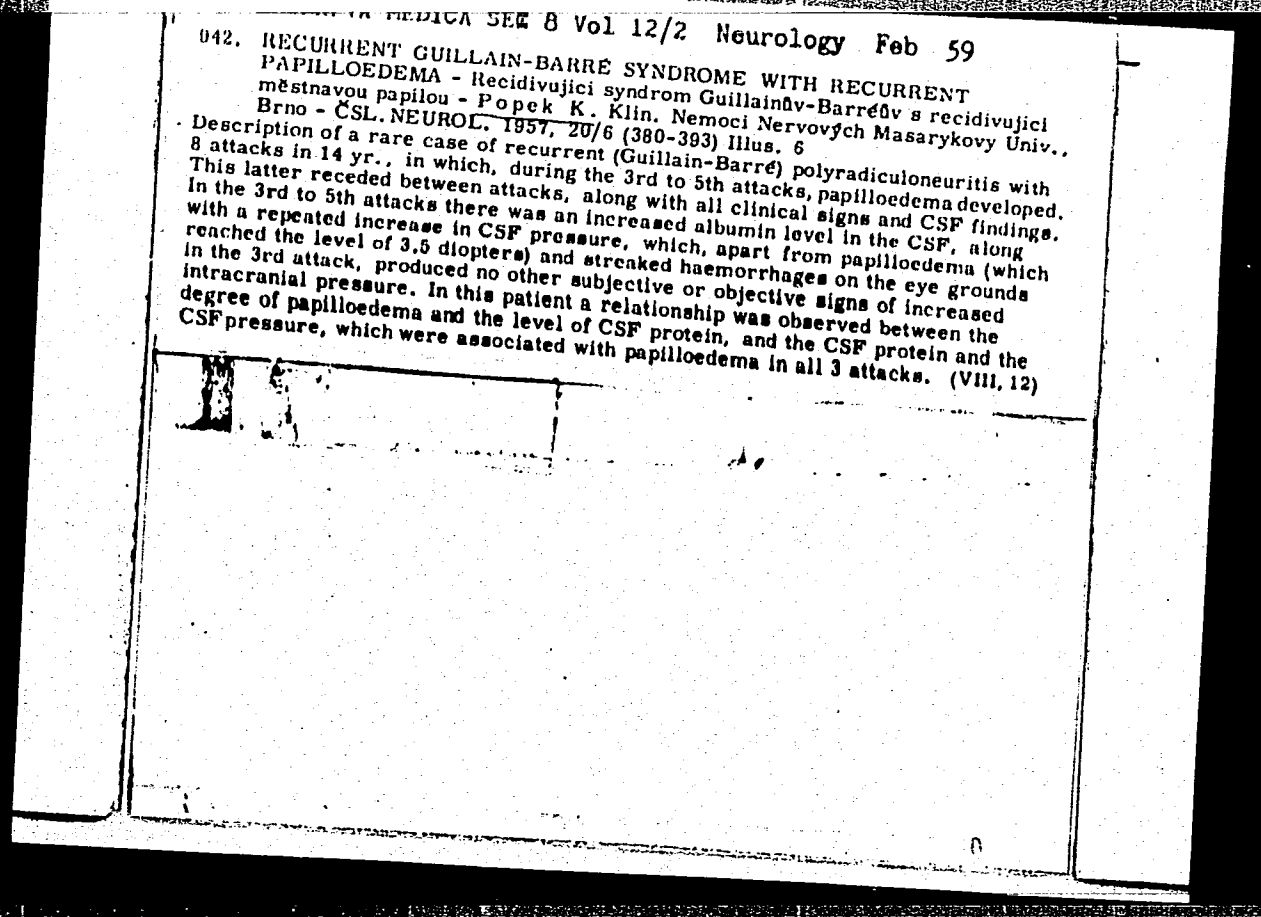
POPEK, K.
(Article # 518)

Kliniky chorob nervovych Ma sarykovy Univ. v Brno. Myalgia epidemica cili
bornholmska nemoc Epidemic myalgia or Bornholm's disease Lek. Listy 1951,
6/11 (313-318)

Description of a clinically typical case (virological tests failed) of the
disease in a boy aged 14 - the first in Czechoslovakia. It was an absolutely
isolated case in which the lumbar muscles and those of the lower extremities
were mainly affected and in which a slight leucocytosis was seen during the
free interval of 8 days.

Bloch - Amsterdam (XX, 6,7,8)

SO: EXCERPTA MEDICA Vol. 5 No. 2 Sec. VIII February 1952



POPEK, K., Prof. MUDr.; VAGNER, B., MUDr.; DOSTAL, J., MUDr. (adb. assist.)

Interrelation of signaling systems in man determined with the aid of suggestion supported by amplitude changes of heart contraction as an indicator. Cesk. neur. 21 no.2:76-89 Mar 58.

I. Klinika nemoci nervovych, prednosta prof. MUDr K. Popek, I. vnitřni klinika MU v Brne, prednosta prof. MUDr M. Stejfa.

(CEREBRAL CORTEX, physiol.

interrelation of signaling systems in humans, determ. by suggestion & amplitude changes of heart contraction (Cz))

(SUGGESTION

role in determ. of interrelation of signaling systems in humans, with tests of amplitude changes of heart contraction (Cz))

(HEART, physiol.

contraction, amplitude changes caused by suggestion in determ. of interrelation of signaling systems in humans (Cz))

~~POPEK, Karel~~ (Brno, Tvrdeho 26.)

Significance of the cerebrospinal fluid in the establishment of etiologic.
Cesk. neur. 22 no.1:1-10 Feb 59.

1. Klinika nervovych nemoci Masarykovy university v Brne, prednosta prof.
MUDr. Karel Popek.

(NERVES, OPTIC, dis.

neuritis, etiol. relation to multiple sclerosis, CSF factor
(Cz))

(NEURITIS, CSF in,

optic neuritis, CSF factor in determ. of etiol. relation to
multiple sclerosis (Cz))

(MULTIPLE SCLEROSIS, CSF in,

determ. of etiol. relation to optic neuritis by CSF factor
(Cz))

POPEK, K.

Impairment of Purkyne after-images in multiple sclerosis.
Activ.nerv.sup. 5 no.4:352-357 '63.

1. Neurologická klinika lékařské fakulty UJEP, Brno.

*

POPEK, K,

The study of changes in the so-called successive contrast
in neurology. *Activ. nerv. sup.* 6 no.1:67-68 '64.

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POPEK, K.

Significance of study of changes in Purkyne's after-images on
concussion of the brain. Rev. czech. med. 8 no.4:233-244 '62.

1. Clinic of Nervous Diseases, Medical Faculty, Purkyne University,
Brno; Director: Prof. K. Popok.
(AFTERIMAGE) (BRAIN INJURY, ACUTE)

POPEK, K.

Effect of the study of changes in Purkinje afterimages in brain concussion. *Cesk. neurol.* 25 no.2:136-146 Mr '62.

1. Klinika nervovych nemoci lebarske fakulty University J. E. Purkyně v Brne, prednosta prof. MUDr. Karel Popek.

(BRAIN wds & inj) (VISUAL PERCEPTION)

POPEK, Karel

Pediatric neurology in the Moravy region. Cesk. neur. 23 no.4:
222-224 Je '60.

1. Klinika nervovych nemoci University v Brne, prednosta prof.
MUDr. Karel Popek.
(PEDIATRICS)
(NEUROLOGY)

POPEK, Karel

Headache in children. Cesk. neur. 23 no.4:225-233 Je '60.

1. Klinika nemoci nervovych University v Brne, prednosta
prof. MUDr. Karel Popok.
(HEADACHE in inf. & child)

POPEK, L.

Protection of respiratory organs against dust by respirators, p. 199,
RUDY (Ministerstvo hutniho prumyslu a rudnych dolu) Praha, Vol. 3,
No. 7, July 1955

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 4, No. 12, December 1955

L-23654-66 EWP(j)/T/ETC(m)-6 WW/RM

ACC NR: AP6009335 (A) SOURCE CODE: CZ/0078/65/000/011/0003/0003

AUTHOR: Popek, Ladislav (Engineer); Belohlavek, Alois (Prague) 44

ORG: none

TITLE: Thermal-insulating laminated textiles. CZ Pat No. PV 4075-63, Class 8X

SOURCE: Vynalezky, no. 11, 1965, 3

TOPIC TAGS: textile, thermoplastic material, thermal insulation, polyethylene plastic

ABSTRACT: An Author Certificate has been issued for laminated textiles for insulation against radiation heat. The textiles consist of woven, knit, or otherwise composed base material, made of natural, mineral, vitreous or thermoplastic fibers or plastic foils, coated on one or both sides with resistant aluminum layer, applied by vacuum or in the form of an aluminum lacquer. The outside of the resistant layer is covered with a flexible film such as polytetrafluorethylene, polytrifluorethylene, or silicon rubber which withstands radiation heat up to 20 cal/min/cm². [KP]

SUB CODE: 11

SUBM DATE: 15Jul63/

Card 1/1 FV

POPEK, Ladislav, /inx.

Protection of respiratory organs of metallurgical plant masons and electric furnace cleaners from excessive heat and harmful dust. Zdravot tech 7 no.5:197-207 '64.

1. Research Institute of Industrial Safety of the Revolutionary Trade Unions, Prague.

GORECKI, Henryk; POPEK, Leslaw

Modeling of control systems on a pneumatic analyzer of
differential equations. Pt. 2. Archiw gorn 8 no. 1:43-67
'63.

GORECKI, Henryk; POPEK, Leslaw

Testing a pneumatic analyzer of differential equations. Archiw
gorn 7 no.4:379-412 '62.

POPEKHIN, M.

High engineering efficiency of welded units. *HTO 2 no.7:20-21 JI*
'60. (MIRA 13:7)

1. Uchenyy sekretar' seksii svarki Moskovskogo oblastnogo prav-
leniya Nauchno-tekhnicheskogo obshchestva mashinostroitel'noy
promyshlennosti.

(Welding)

POPEK, Milan, inz.

Typical layouts for mine faces. Uhli 7 no.4:149 '65.

1. Scientific Research Institute of Coal, Ostrava-Radvanice.

VASEK, Jaroslav, inz.; POPEK, Milan, inz.; SKRICEK, Jiri

Problems of mechanization of low seam mining in the Ostrava-Karvina coalfield. Uhli 6 no. 8:270-272 Ag '64.

1. Scientific Institute of Coal Research, Ostrava-Radvanice.

POPEK, Milan, inz.; VASEK, Jaroslav, inz.

Mining thin coal seams by cutter loaders. Unli 7 no. 2:50-
53 '65.

1. Scientific Research Institute, Ostrava-Radvanice.

POPEK, Milan, inz.; SUCHANEK, Josef, inz.; VASEK, Jaroslav, inz.;
PAVLONKA, Frantisek, inz.

Within 31 workdays 118,327 tons of coal extracted at the May 1 mine.
Uhli 6 no.11:386-389 N '64.

1. Scientific Research Institute of Coal, Ostrava-Radvanice (for
all except Pavlonka). 2. May 1 mine (for Pavlonka).

POPEKHIN, M.M.

POPEKHIN, M.M., inzhener.

Amount of excess reinforcement of an electrically welded seam.

Energetik 2 no.6:6 Je '54.

(MLRA 7:7)

(Electric welding)

POPEKHIN, M.M., inzhener.

Improving the operating dependability of the electrical equipment
of industrial consumers during temporary voltage drop. Elek.sta. 25
no.12:51-52 D '54. (MLBA 7:12)
(Electric machinery)

POPEKHIN, M.M., inshenr.

Protective systems operating on alternating current with two TKB-1
current transformers connected in series. Elek.sta. 25 no.12:52 D '54.
(Electric transformers) (MLRA 7:12)

POPEKHIN, M.M., inzhener.

Conference on welding. Elek.sta. 25 no.12:52-53 D '54. (MLRA 7:12)
(Electric welding)

POPEKHIN, M.M.

AID P - 581

Subject : USSR/Engineering

Card 1/1 Pub. 78 - 18/22

Author : Fudel'man, Yu. L. and Popekhin, M. M.

Title : Approximate method of modelling in tank building

Periodical : Neft. Khoz., v. 32, #8, 82-85, Ag 1954

Abstract : The use of a small model tank with geometrical, but not physical similarity, is described for simplified determination of the distribution of stresses, the dimensions of construction details, and for solution of various problems on assembling, maintenance, and repairs. 2 tables.

Institution : None

Submitted : No date

POPEKHIN, M. M.

USSR/ Scientific Organization - Conferences

Card 1/1 Pub. 128 - 30/35

Authors : Popokhin, M. M.

Title : Scientific-technical conference on welding

Periodical : Vest. mash. 35/3, 86 - 87, Mar 1955

Abstract : An account is given of a conference held in the City of Kiev in June of 1954, organized by the E. O. Paton Institute of Electrical Welding of the Ukrainian Academy of Science and the Kiev branch of the All-Union Scientific-Research Institute of Technical Equipment of Welders. The main purpose of the conference was to deliberate on the work of the Institute of Electrical Welding. The conference was attended by 278 delegates.

Institution :

Submitted :

FOPEKHIN, M.M., inzh.; FEDOROV, L.N., inzh.

Ninth Scientific and Technical Conference of Moscow and Moscow
region welders. Svar. proizvod. no.7:41-43 J. '64.

(MIRA 18:1)

POPEKHIN, M.M.

Seminar on efficient planning of welded structures. Avtom.
svar. 18 no.5:79 My '65. (MIRA 18x6)

L 1363d-66 EWT(l)/EWT(m)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c) IJP(c)

ACC NR: AP5018702 MJW/JD/HM/HW

SOURCE CODE: UR/0125/65/000/007/0078/0079

AUTHOR: Popekhin, M. M. (Engineer)

ORG: none

TITLE: Tenth conference on welding in Moscow

SOURCE: Avtomaticheskaya svarka, no. 7, 1965, 78-79

TOPIC TAGS: welding, metal welding, high strength steel, thermomechanical property, weld heat treatment, titanium alloy nickel alloy, scientific conference

ABSTRACT: The 10th conference on welding science and engineering was held 14-15 April 1965 in Moscow under the sponsorship of the Scientific-Engineering Society of the Machine-Building Industry. Fifty-three papers were presented, and 630 welding specialists attended the conference. Yu. L. Krasulin discussed methods of calculating the power parameters of a laser beam, suggested a method of calculation for regular and irregular beams, and presented results of calculations for the case of a heavy copper plate. B. I. Antipov (Institute of Metallurgy im. A. A. Baykov) reported on low temperature thermomechanical treatment of hardenable steels. The method can be applied to weldments either during or after welding. V. A. Rodionov discussed a method for increasing the design strength of superstrength steel welds by step-by-step upsetting of the locally preheated weld zone. V. Ya. Leont'ev and N. P. Borisov spoke on ways of improving the reliability of MIG and TIG welds in nickel-base alloys and stainless and pearlitic steels. O. V. Meshkova and Ye. V. Bush (Giproneftemash), A. G. Smirnov, and Yu. G. Kirillov discussed

Card 1/2

UDC: 621.791.008.1

L 13638-66

ACC NR: AP5018702

the weldability of V92 (aluminum-base) alloy and thin sheets of AlMg alloy, the welding of Kh8VF heat-resistant steel, and the welding of 25KhGNVFA steel with preheating. B. P. Morozov (MATI) reported on electron-beam and argon-shielded arc welding of molybdenum and niobium to stainless steel with no reaction between the welded metals and without melting refractory metals. F. R. Kulikov, G. Ye. Kainova, and Yu. S. Dolgov presented reports on the weldability of titanium alloys.

SUB CODE: 11 / SUBM DATE: none

Joining of dissimilar metals

Card

2/2

NW

POPEKHIN M. A., inzh.

Readers' conference in Moscow. Svar. proizv. 12:41-42 D '63.

(MIRA 18:9)

1. Uchenyy sekretar' seksii svarki Moskovskogo gorodskogo pravleniya nauchno-tekhnicheskogo obshchestva mashinostroitel'noy promyshlennosti.

POPEKHIN, M.M., inzh.

Branch conference on flame machining processes in machine manufacture.
Svar. proizv. no.3:45 Mr '65. (MIRA 18:5)

POPEKHIN, M.M., inzh.

Welding operational enterprises of the chemical industry of the
Moscow City Council of National Economy. Svar.proizv. no. 2:40
F '64. (MIRA 18:1)

POPEKHIN, M.M.

Complete automation and mechanization of blanking operations. Avtom.
svar. 16 no.6:87-88 Je '63. (MIRA 16:7)

1. Moskovskiy gorodskoy sovet narodnogo khozyaystva.
(Gas welding and cutting)

POPEKHIN, M.M., inzh.

Necessity of introducing a new technological characteristic
of electrodes for the spatter coefficient. Svar. proizv. no.2:
38-39 F '62. (MIRA 15:2)

(Electrodes)

POPEKHIN, M.M.

Contribution of Moscow welders. Mashinostroitel' no.10:
17 0 '61. (MIRA 14:9)
(Moscow—Electric welding)

POPEKHIN, M.M., inzh.; ZVEGINTSEVA, K.V., inzh.

Greater use of welding in enterprises under the Moscow
City Economic Council. Svar. proizv. no,10:12-44 0 '61.

(MIRA 14:9)

(Moscow---Welding)

POPEKHIN, M.M.

Annual Moscow Conference on Welding. Avtom. svar. 14 no.8:93-95
Ag '61. (MIRA 14:9)

(Welding--Congresses)

POPEKHIN, M.M., inzh.

"Mechanization of resistance welding" by S.E. Semiachkin.
Reviewed by M.M. Popokhin. Svar. proizv. no. 9:44-45 B '61.
(MIRA 14:8)

(Electric welding— Equipment and supplies)

(Semiachkin, S.E.)

TYURIN, V.F., inzh.; POPEKHIN, M.M., inzh.

Technological conference on welding in Moscow. Svar. proizv.
no.7:43-44 JI '61. (MIRA 14:6)
(Welding—Congresses)

POPEKHIN, M.M., inzh.

Conference of Moscow Province welders. Svar.proizv. no.8:
40-41 Ag '60. (MIRA 13:7)
(Welding--Congresses)

1.2300

1573

27936

S/135/61/000/010/008/008
A006/A101AUTHORS: Popekhin, M. M., Zvegintseva, K. V., Engineers

TITLE: Development of welding in the Mosgorsovnarkhoz

PERIODICAL: Svarochnoye proizvodstvo, no. 10, 1961, 43

TEXT: The article includes information on the development and assimilation of new basic and accessory welding equipment and new advanced welding methods. At the Moscow Pipe Plant, for instance, a machine became operative for the welding of pipes by radiofrequency currents. On this machine 300,000 m of pipes, 16 mm in diameter and with 1.5 mm thick walls have already been produced from carbon steel. The welding speed attains 45 - 60 m/min. In the near future a large mill will be put into operation for welding stainless steel pipes of 25 - 102 mm in diameter and with up to 4 mm thick walls; the welding speed will be 25 - 30 m per minute, against 0.6 - 1.0 m/min attained by argon-arc welding. The afore-mentioned work is carried out in cooperation with NIITVCh imeni V. P. Vologdin. Together with NIAT an automatic welding torch was designed for welding titanium pipes. A trial batch has already been welded and the industrial output

Card 1/2

27936
3/135/61/000/010/008/008
A006/A101

Development of welding in the Mosgorsovnarkhoz

of welded pipes will be started; replacing pressed pipes of 25 - 76 mm in diameter and with 1 - 2 mm thick walls. The welding of titanium pipes is performed in an argon-filled semi-hermetical chamber.

XX

Card 2/2

S/125/61/000/008/012/014
D040/D113

AUTHOR: Popekhin, M.M.

TITLE: The annual Moscow welding conference

PERIODICAL: Avtomaticheskaya svarka, no. 8, 1961, 94

TEXT: The Moskovskaya yezhegodnaya konferentsiya po svarke (Annual Moscow Welding Conference) was held from March 21-22, 1961. This conference was organized by the Moscow city and oblast boards of the NTO Mashprom and the technical department of the Moscow city sovnarkhoz. Engineer D.M. Shashin (MVTU) in his report on "The effect of aging at 350-650°C on the properties of welded joints from 18-8 type steel", showed that the aging of weld metal depends on both the size and the quality of the alpha-phase. ✓

Card 1/1

S/135/61/000/007/011/012
A006/A106

AUTHORS: Tyurin, V. V., Popekhin, M. M., Engineers

TITLE: The Moscow scientific and technical welding Conference

PERIODICAL: Svarochnoye proizvodstvo, no. 7, 1961, 43-44

TEXT: The VI. annual welding Conference was convened on March 21-22, 1961, in Moscow by the Moscow NTO MASHPROM municipal administration, Mosgorsovnarkhoz and the NTO MASHPROM regional administration. The Conference was attended by about 400 delegates and guests. It was opened by Professor N. N. Rykalin, Corresponding Member of AS USSR, Chairman of the welding section of the Moscow administration of NTO MASHPROM. The Conference then heard the following reports: M. Kh. Shorshorov, Candidate of Technical Sciences and Engineer G. V. Nazarov, IMET imeni Baykov, on "Kinetics of phase transformations and the formation of cold cracks in titanium alloys during welding"; Engineers L. A. Fridlyand, Yu. K. Konov and T. N. Zinov'yeva on "Kinetics of intermetallic phase formation during welding of dissimilar metals"; Candidate of Technical Sciences A. N. Krutikov and Engineer T. V. Arest, NIIKHIMMASH, on "Weldability and corrosion resistance of bimetals: steel-copper, steel-bronze, steel-brass"; Engineer

Card 1/5

The Moscow scientific and technical ...

8/135/61/000/007/011/012
A006/A106

N. V. Tolmacheva and Candidate of Technical Sciences A. Ya. Brodskiy, TsNIISK, on "Weldability of heat-strengthened low-carbon steel"; Candidate of Technical Sciences, G. D. Nikiforov, MATI, on "Conditions of pore formation in weld metal during welding of aluminum and its alloys and research of effective measures to prevent porosity"; Engineer O. G. Tkachenko, TsNII MPS, on the weldability of new rail steels of higher strength; Engineer V. S. Gavrilyuk, MVTU imeni Bauman, on the effect of alloying components on the plasticity of weld joints in the crystallization temperature range; Engineer D. M. Shashin, MVTU imeni Bauman, on the effect of aging at 350-650°C on the properties of 18-8 type steel welds; Candidate of Technical Sciences A. A. Yerokhin, Engineers A. N. Bykov and O. M. Kuznetsov, IMET imeni Bavlkov, on "Processes of ferromanganese oxidation during the heating of electrode coatings"; Engineer I. N. Vornovitskiy, VNIIST, on "Developing BC4-1 (VSTs-1) cellulose electrodes for welding main pipelines"; Engineer Ye. M. Rogova, VNIIST on "Technological and metallurgical peculiarities of electrodes with plastic coatings"; Engineer P. B. Ladyzhinskiy on "Unification of electrodes for welding stainless 18-8 type steels"; Engineer I. M. Vagapov, on "High-efficiency electrodes for welding structural steels"; Engineer T. V. Berg on "Mechanization of manufacturing electrodes for welding aluminum"; Engineer V. P. Zvyagintsev, VNIPTUGLEMASH, on developing the composition and technology

Card 2/5

The Moscow scientific and technical ...

S/135/61/000/007/011/012
AC06/A106

for manufacturing ceramic magnetizing fluxes; Engineer V. M. Yelagin on an automatic machine with servo-mechanisms directing the welding torch along the weld, constant arc length and TV remote control; Engineer K. S. Moroz, VPTI MGSNKh, on the organization of model welding practice at the "Kompressor" Plant; Engineer A. V. Shadrin, Koloma Locomotive Building Plant, on the same subject; Engineer K. P. Voshchanov, TsESM VNIIVTOGEN, on the work of Central experimental welding shops concerning the introduction of advanced welding methods at Mosgor-sovnarkhoz plants; Engineer M. I. Grigor'yeva, and G. K. Nikonov, NIITRAKTOR-SEL'KhoZMASH, on "Automated welding of horizontal seams on box-section assemblies"; Engineer Yu. I. Nekrasov, VNIIVTOGEN, on "Automated hardfacing up of plowshares"; Engineer M. S. Kaufman, VNIPTUGLEMASH, on hardfacing operational components of pneumatic centrifugal crushers; Engineer Yu. G. Vinogradov, and Candidate of Technical Sciences V. B. Shlyapin, TsNII MPS on "Some problems of the theory and practical application of vibro-arc hardfacing under flux"; Engineer B. G. Lozhkin, Experimental welding plant, on "Experiences of joint operation of ZIL and OSZ on hardfacing of dies"; Candidate of Technical Sciences G. F. Skakun, and Engineer A. A. Chekalov, Moscow Aviation Technological Institute, on technological peculiarities of ultrasonic resistance welding of SAP sintered aluminum material; Candidate of Technical Sciences, B. D. Orlov and Engineer V. L.

Card 3/5

The Moscow scientific and technical ...

S/135/61/000/007/011/012
A006/A106

Leshchenko on the technology of stepped roller welding of semi-conductor small-diameter equipment; Doctor of Technical Sciences, A. A. Alov, Engineer R. G. Ol'khovik, Engineer V. M. Shmakov and Candidate of Technical Sciences, G. V. Bobrov, on the technology of argon-arc butt welding with consumable electrodes of 40 x 50 and 50 x 60 aluminum-magnesium bars; Candidate of Technical Sciences I. D. Kulagin and Engineer A. V. Nikolayev, IMET imeni Baykov, on "Thermal and mechanical characteristics of plasma arc jet"; Candidate of Technical Sciences, K. I. Zaytsev, VNIIST, on "Welding plastic insulation coatings of petroleum containers"; Candidate of Technical Sciences N. A. Ol'shanskiy, and Engineer Yu. L. Zorin, MVTU imeni Bauman, on "Welding of metals with non-metallic materials"; Engineer D. V. Leont'yev and Candidate of Technical Sciences, V. B. Shlyapin, TsNII MPS, on "Cold welding of copper contact conductors on railroad and municipal transportation"; Engineer I. S. Shapiro, VNIIVTOGEN, on oxygen cutting of steel without preheating; Candidate of Technical Sciences R. I. Zakson and Engineer V. D. Voznesenskiy, NIITRAKTOROSSEL'KhOZMASH, on the technological possibilities of friction welding; Doctor of Technical Sciences, F. I. Kislyuk, on "Some non-destroying methods of controlling the quality of butt welds during resistance welding"; Candidate of Technical Sciences A. M. Gofner and Engineer G. M. Turkel'taub on "Mechanized welding with a wire having an internal core"; Engineer

Card 4/5

The Moscow scientific and technical ...

S/135/61/000/007/011/012
A006/A106

V. V. Zheltenkov, on "Mechanized welding in continuous production of aluminum containers in an assembly shop"; Candidate of Technical Sciences A. V. Petrov and Engineer G. A. Slavin, on "Welding thin-sheet materials"; Engineer A. S. Popov on "Experiments on welding-up containers with liquid fuel residue"; Ye. V. Sokolov on the work of the periodical "Svarochnoye proizvodstvo"; Candidate of Technical Sciences Ye. N. Terpugov on the reference journal "Svarka".

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L 15770-63

EWP(k)/EWP(q)/EWT(m)/BDS

AFFTC/ASD

Pf-4

JD/HM/JG/JH

ACCESSION NR: AP3004561

S/0125/63/000/008/0093/0095

AUTHOR: Ponakhin, M. M.

94
69

TITLE: Eighth Moscow city conference on welding [April 1963]

SOURCE: Avtomaticheskaya svarka, no. 8, 1963, 93-95

TOPIC TAGS: heat resistant alloy welding, heat resistant alloy hot cracking, titanium alloy welding, titanium alloy weld cracking, 25SKhVFA steel welding, high strength steel delayed failure, SAP resistance welding, zirconium titanium joining, zirconium niobium joining, niobium titanium joining, aluminum alloy TIG welding, SAP fusion welding

27
16

ABSTRACT: The Moscow chapter of the NTO Mashprom sponsored the annual conference on results of work in development and improvement in welding. The conference was attended by more than 600 representatives of plants, research institutes, and other organizations of Moscow, Leningrad, Kiev and other cities. Engineer A. N. Bykov (IMET) showed in his paper that oxidation of weld metal has a substantial effect on the mechanical properties and susceptibility to hot cracking

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L 15770-63

ACCESSION NR: AP3004561

of heat-resistant-alloy welds. The beneficial effect of the purity of base and filler metal on the weld resistance to hot cracking was discussed by Candidate of technical sciences A. V. Russiyar (TsNIICM). The paper of F. Ye. Tret'yakov and A. I. Gorshkov (NIAT) dealt with titanium alloy welding. Engineer A. G. Smirnov spoke on submerged-arc welding of 25SRhVFA steel with induction pre-heating. The effect of welding conditions on ductility of electron beam welded molybdenum joints was discussed by Engineer G. N. Sivov (MATT). The report of Engineer Ye. M. Pronina (NIAT) dealt with fatigue strength of EI703 steel sheet welds. V. B. Verdenskiy and P. P. Chuloshnikov (NIAT) reported on new spot and seam welders and their control systems. Spot welding of clad SAP sheets was discussed by Engineer Yu. V. Dmitriyev, and fusion welding of SAP, by Engineer S. N. Zhiznyakov (MATT). Engineer M. P. Orlov spoke of new power sources for argon-shielded arc welding of thin (0.5 mm or less) aluminum alloy parts.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 27Aug63

ENCL: 00

SUB CODE: ML

NO REF SOV: 000

OTHER: 000

Card 2/2

POPEKHINA, P. S.

25868. POPEKHINA, P. S. Balans azota, kal'tsiya i fostora u rastushchikh plemennykh sviney pri raznykh ratsionakh. Trudy Vsesoyuz. nauch.-issled. in-ta zhiivotnovodstva, t. XVI, 1949, S. 38-52.--Bibliogr: 8 nazv.

So. Letopis' Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

POPEKHINA P. S.
USSR / Farm Animals. Swine.

Q-4

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 64506

Author : Popekhina, P. S.

Inst : All-Union Scientific Research Institute of Animal Husbandry

Title : Azotobacterin as a Stimulator of Growth and Fattening of Pigs.

Orig Pub : Byul. nauchno-tekhn. inform. Vses. n.-i. in-t zhivotnovodstva,
1957, No. 1 (3), 10-12

Abstract : Thirty weanling pigs $2\frac{1}{2}$ months old were divided into 3 groups. The 1st group (control) was fed the basic ration, the 2nd one - basic ration plus 0.293 liters of azotobacterin, the 3rd one - basic ration plus 0.688 liters of azotobacterin per head daily. During the test period, the general gains obtained according to groups were: 275.3, 289.4, and 302.2 kg., respectively. The second series of experiments, carried out to test the effectiveness of the dry preparation of azotobacterin, produced analogical results.

Card 1/1

41

USSR/Farm Animals. The Swine

2-4

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50070

Author : ~~Popekhina P.S.~~

Inst :

Title : Azotobacterin as a Stimulant of Growth and of Fattening Processes in Swine.

Orig Pub : Nauka i peredov. opyt v s. kh., 1957, No 8, 17-18

Abstract : Tests were carried out on the diet of weaned and fattened pigs to which azotobacterin was added. The 1st group served as a control group. The second group received 0.02 gr and the 3rd group 0.05 gr doses of the dry preparation per 1 kg of the live weight of the animals. The average daily weight gains for each group, respectively, were 530 gr, 555 gr, and 623 gr. Expenditures of fodder per 1 kg of the weight increase amounted to 4.4, 4.2, and 3.7 of the feed units, respectively. In fattening for meat, the 1st group received a corn-concentrate diet; the 2nd group received in addition

Card : 1/2

USSR/Farm Animals. The Swine

Q-4

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50070

to this diet azotobacterin; and the 3rd group received the same diet as the 1st group and also feeds of animal origin. The daily weight gains for each group, respectively, amounted to 764 gr, 828 gr, and 816 gr. Each of the 3 groups, respectively, produced 38.3 kg, 43 kg, and 40.4 kg of meat. It is recommended that azotobacterin be added to feeds of weaned piglets in daily dosages of 0.05 gr per 1 kg of live weight. -- F.M. Kazantsev

POPEKHINA, P. S.

Q-2

USSR/Farm Animals. Swine.

Abs Jour: Ref Zhur - Biol., No. 22, 1958, 101205

Author : Popekhina, P.S.

Inst : ~~All-Union Scientific Research Institute of~~
Animal Husbandry.

Title : Effectiveness of Rations Containing Azotobacterin
for the Raising and Fattening of Pigs.

Orig Pub: Tr. Vses. n.-i. in-ta zhivotnovodstva, 1957, 21,
137-143

Abstract: Dry azotobacterin preparations contain nitrogenic
substances and vitamin B12 in amounts from 4 to
14 % percent. As rations of weaned piglets were
supplemented with azotobacterin and titer paste,
one gram of which contained 90-120 billions, by
using 0.05 g per each kg of live weight the

Card 1/2

50

USSR/General Biology. Individual Development.
Embryonic Development.

B-4

Abs Jour : Ref Zhur-Biol., No 16, 1958, 71597

Author : Gorbachova, A. P., Popekhina, P. S.

Inst : -

Title : Age Determined Changes in Amino Acid Contents
in Pig Embryos.

Orig Pub : Ukr. biokhin. zh., 1957, 29, No 1, 96-100

Abstract : The content of water decreases and the quantity of mineral substances increases in proportion to the growth of pig embryos. The content of proteins in the first 40 days of development increases somewhat and then decreases sharply. Throughout embryogenesis, the ratio of different amino acids also changes. The

Card : 1/2

23

GOEBACHEVA, A.P., kand. biol. nauk; POPEKHINA, P.S., kand. sel'skokhozyaystvennykh nauk.

Changes with age in the amino acid content of swine embryos. Zhivotnovodstvo 20 no.5:82-85 My '58. (MIRA 11:5)
(Amino acids) (Swine—Physiology) (Fetus)

POPEKHINA, P.S., kand. sel'skokhoz. nauk

Betazin speeds fattening. Zhivotnovodstvo 23 no.3:83-85
Mr '61. (MIRA 17:1)

POPEKHINA, P.S., cand. agric. sc.

Protein level in rations for fattening swine. Zeaz probl post nauk
roln no.43:43-53 '63.

1. Chief editor of "Svinovodstvo," Moscow.

SHIBUKAWA, T. I., SHIBUKAWA, T. I., SHIBUKAWA, T. I., SHIBUKAWA, T. I.

"The Effect of Betazine on Thyroid Function and the
Composition of Lipids in Muscle and Liver."

Report Presented at the 5th International Biochemistry Congress,
Moscow, 10-16 August 1961

POPEKHINA, P. S. (USSR)

"Metabolic changes in animals under the influence of
diiodinetirosine (read by title)."

Report presented at the 5th International Biochemistry Congress,
Moscow, 10-16 August 1961.

ACC NR: AP 7001728

SOURCE CODE: UR/0048/66/030/012/2040/2047

AUTHOR: Popoko, L.A.; Val'skiy, G.V.; Petrov, G.A.; Kaminker, D.M.

ORG: none

TITLE: Delayed gamma radiation from fission fragments from the slow neutron induced fission of U 235 [Report, Sixteenth annual Conference on Nuclear Spectroscopy and Nuclear Structure held at Moscow, 26 Jan. - 3 Feb. 1966]

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no.12, 1966, 2040-2047

TOPIC TAGS: nuclear fission, fission product, gamma spectrum, delayed gamma emission, uranium

ABSTRACT: The authors have investigated delayed gamma radiation emitted by fission fragments from the slow neutron induced fission of U²³⁵. The target was a 2.3 cm diameter 400 µg/cm² thick film of uranium oxide on a 40 µg/cm² aluminum oxide substrate. The target was mounted between two n-p type gold-silicon semiconductor detectors, which served to record the two fission fragments, and was located in the neutron beam from a reactor. The direction of the neutron beam was parallel to the plane of the target. The gamma rays were detected by a 3 x 4 cm NaI(Tl) scintillator immediately beyond one of the fission fragment detectors. This scintillator recorded with good efficiency only gamma rays produced in its immediate vicinity, i.e., it recorded essentially only gamma rays emitted by a fragment after it had been brought

ACC NR: AP 7001728

to rest in the associated semiconductor detector. The minimum delay of the recorded gamma rays was thus determined by the fragment flight time from the target to the detector; this detector was mounted 10 cm from the target, and the minimum delay time was accordingly about 10^{-8} sec. The pulses from the semiconductor detectors and the scintillator were analyzed in a rather complex electronic circuit and were recorded in pulse height analyzers. The delayed gamma ray spectra from the heavier and the lighter fragments are presented graphically. The lighter fragment produced more delayed gamma rays per fission than did the heavier one. A peak was observed in each of these spectra that had not been found in the previous work of the authors (Atomnaya energiya, 19, 186 (1965)). It is suggested (but it was not confirmed) that each of these peaks may be due to simultaneous recording of gamma rays belonging to two other peaks observed in both experiments. The gamma ray spectrum was investigated as a function of the fragment mass. For this investigation the gamma ray energy range was divided into three regions (above 40 keV, between 100 and 185 keV, and between 185 and 250 keV), the fission fragment masses were determined from the kinetic energies of the two fragments from the same fission, and the results are presented graphically. There are considerable differences between the curves for the different gamma ray energy ranges, and between the present curves and the analogous curves obtained by Sven A.E. Johansson (Nucl. Phys., 64, 147 (1965)) for spontaneous fission of Cf^{252} . No dependence of the delayed gamma ray spectrum on the total mass of the two fragments could be detected. The authors thank V.F. Afanas'yev for fabricating the large semiconductor detectors, and V.D. Yurchenko and E.B. Rodzevich for assisting with the measurements. Orig. art. has: 9 figures.

SUB CODE: 20
Card 2/2

SUBM DATE: None

ORIG REF: 003 OTH REF: 004

AGG III: APOUNHAAI

00/0000/00/010/000/0100/0100
539.173

32
28
8

AUTHOR: Popeko, L. A.; Val'skiy, G. V.; Kaminker, D. M.; Petrov, G. A.

TITLE: Delayed gamma radiation in U235 fission

SOURCE: Atomnaya energiya, v. 19, no. 2, 1965, 186-188

TOPIC TAGS: gamma radiation, nuclear fission, nuclear physics apparatus

ABSTRACT: The delayed gamma radiation from fission fragments was investigated for time intervals of 10 to 70 nano-sec and energy levels from 30 to 500 kev. Approximately, 200 mkg of U235 were used to form a 8-cm target spot of 20 mkg/sq cm density on a Al₂O₃ backing. The target was placed in a vacuum chamber traversed by a neutron beam from VVR-M reactor. A silicon detector was placed at a 58 mm distance above the target to check the fission fragments. Energy resolution of the scintillation spectrometer for Cs137 line was 10%. The fragments heading toward the detector could be absorbed by a movable 4 mg/sq cm aluminum curtain interposed at a distance of 15 mm from the target. The delayed gamma rays were measured when the curtain was open while the background measurements were made with the closed curtain. The results

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L 5069-66
ACC NR: AP5022641

4

of measurements were illustrated by two curves showing the distribution in time of pulse coincidences for both open and closed curtain positions. The average half-life was 28 nsec for heavy fragment groups and 35 nsec for light fragments. The amplitude distribution of fragment pulses without coincidence was also graphically plotted as well as the spectra of delayed gamma rays. A table gives the data on the energy and yield of delayed gamma quanta. The measuring device arrangement is schematically outlined. The authors express their gratitude to A. I. Yegorov (preparation of target), V. F. Afanas'yev (preparation of detector), V. D. Yurchenko and E. B. Rodzevich (general assistance).
Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 17Nov64

ENCL: 00

SUB CODE: NP

NO REF SOV: 004

OTHER: 000

Card 2/2 *md*

0806 148

VAL'SKIY, G.V.; KAM.NIKER, D.M.; PETROV, G.A.; POPEKO, L.A.

Times of emission of gamma quanta in fission. Atom. energ. 18
no.3:223-226 Mr '65. (MIRA 18:3)

KOTLYAR, G.V.; POPEKO, L.I.

Age of Permian sediments in the Chironskoye field (Onon-Shilka
interfluve). *Izv.vys.ucheb.zav.; geol. i razv.* 6 no.10:28-34
0 '63. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut
i Chitinskoye geologicheskoye upravleniye.

L 45577-65 EWT(m)/EPF(n)-2/EWP(t)/EWP(b)/EWA(h) Peb/Pu-4 LJP(c) JD/WH/JG/DM

ACCESSION NR: AP5009110

S/0089/65/018/003/0223/0225

AUTHOR: Val'skiy, G. V.; Kaminker, D. M.; Petrov, G. A.; Popoko, L. A.

24
B

TITLE: Fission Gamma-quantum emission times

SOURCE: Atomaya energiya, v. 18, no. 3, 1965, 223-226

19

TOPIC TAGS: uranium fission, thermal neutron fission, fission fragment, Gamma emission time

ABSTRACT: In view of the discrepancies in the results of investigations of the lifetimes of excited states of fission fragments, the authors attempted a direct estimate of the moving fragments by a geometrical separation method analogous to that used to determine the lifetimes of excited states of products of nuclear reactions. The experimental set-up is illustrated in Fig. 1 of the Enclosure. The fissioning U^{235} oxide was a layer of density of $100 \mu\text{g}/\text{cm}^2$ on a metallized polyvinyl chloride acetate film. The fission fragments were counted with a silicon detector and the quanta with an NaI(Tl) scintillation counter. The coincidences between the fragments and the quanta were recorded as a function of the distance from the collimator axis to the target. Unlike data obtained in earlier investigations it is concluded

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L 45577-65

ACCESSION NR: AP5009110

that the bulk of the radiation is emitted within 5×10^{-11} sec following the fission. Not more than 5--10% of the radiation accompanying the fission is produced in the interval 3×10^{-10} -- 2×10^{-8} sec. Orig. article has: 3 figures.

ASSOCIATION: None

SUBMITTED: 26Feb64

ENCL: 01

SUB CODE: NP

NR REF SOV: 002

OTHER: 003

Card 2/3

PETROV, G.A.; KAMENKER, D.M.; VAL'SKIY, G.V.; POPEKO, L.A.

Angular distribution of gamma quanta of fission of U^{233} , U^{235} ,
and U^{239} on thermal neutrons. Atom. energ. 18 no.1:64-65 Ja '65.
(MIRA 18:2)

L 27264-65 EWT(m) DIAAP DM

ACCESSION NR: AP5004007

S/0089/65/018/001/0064/0065

AUTHORS: Petrov, G. A.; Kaminker, D. M.; Val'skiy, G. V.; Popeko,
L. A.

TITLE: Angular distribution of gamma quanta from the fission of
U-233, U-235, and Pu-239 by thermal neutrons

SOURCE: Atomnaya energiya, v. 18, no. 1, 1965, 64-65

TOPIC TAGS: thermal neutron fission, uranium fission, plutonium
fission, fission gamma quanta, angular distribution

ABSTRACT: The purpose of the investigation was to measure the angular correlation of the fragments and the gamma rays produced during the fission, and to establish the dependence of the anisotropy of the emitted gamma quanta on the nature of the target nucleus and on the gamma-quantum energy. The work was performed on the VVRM reactor of the Leningradskiy fiziko-tehnicheskii institut. A diagram of the

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experimental set-up is shown in Fig. 1 of the enclosure. The experimental procedure and some of the special equipment employed are described briefly. The results show that for U^{233} , U^{235} , and Pu^{239} the values of the anisotropy are nearly equal, with the maximum difference expected between U^{235} and Pu^{239} , and with the experimental data giving a somewhat higher value for the gamma anisotropy in the case of Pu^{239} . It is concluded that higher accuracy is necessary for more definite deductions. Orig. art. has: 2 figures and 1 table.

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