

39848

S/190/62/004/008/007/016
B101/B180

5.3832

AUTHORS: Berlin, A. A., Popova, Z. V., Yanovskiy, D. M.

TITLE: Polymers with conjugate bonds in the macromolecular chains.
XXIV. Effect of polymers with conjugate bonds on the
stability of polyvinyl chloride

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 8, 1962,
1172-1177

TEXT: The authors studied the inhibiting effects of polyphenyl acetylene (I), a copolymer of phenyl acetylene with p-diethynyl benzene (II), and a thermal dehydrochlorination product of polyvinyl chloride (PVC) (III) on the thermal decomposition of PVC. Decomposition temperature, induction period and rate of HCl liberation were measured (methods see Zh. prikl. khimii, 33, 186, 1960). PVC without inhibitor was completely dehydrochlorinated after 60 min. at 300°C in vacuo. It was found, that the inhibiting effect (1) depends on concentration and temperature; (2) diminishes in the order I > III > II; (3) is greater with I than with lead stearate, dibutyl lead maleinate, or ethyl resorcinol. On adding 1%

Card 1/2

Polymers with conjugate bonds ...

S/190/62/004/008/007/016
B101/B180

of any of these substances the amounts of HCl (mg/g PVC) liberated after 3 hrs at 175°C were around 8.5, 8.5, 6.5, and 5, respectively; (4) I inhibits thermal decomposition of PVC at 185°C, without acceleration at 195°C which does, however, occur with III, due to the active radicals present in III. The effect of such radicals was confirmed: when heated to above 300°C I lost its inhibiting effect and initiated thermal decomposition. (5) I only stabilizes PVC against thermal effects, not against light. There are 2 figures and 4 tables. The English-language reference is: D. E. Winkler, J. Polymer Sci., 35, 3, 1959.

SUBMITTED: May 8, 1961

Card 2/2

S/191/62/000/005/002/012
B110/B101

AUTHORS: Popova, Z. V., Yanovskiy, D. M., Tatevos'yan, G. O.,
Shtekker, O. A.

TITLE: The effect of polyvinyl chloride decomposition inhibitors
on the decomposition kinetics and light-fastness of poly-
vinyl chloride plasticate

PERIODICAL: Plasticheskiye massy, no. 5, 1964, 3-6

TEXT: Attempts were made to increase the stability of PVC by adding the following inhibitors which do not bind HCl: (1) phenols, (2) aromatic hydroxy ketones, (3) products of the autocondensation of cyclohexanone, and (4) esters of benzoic and salicylic acid. The following substances were investigated: 2,4-dihydroxy benzophenone (I), 2-hydroxy-4-methoxy benzophenone (II), diphenylol propane (III), 2,2-bis-(3-methyl-4-hydroxy-phenyl)-propane (IV), 1,1-bis-(4-hydroxy phenyl)-cyclohexane (V), 2,2',4,4'-tetrahydroxy adipyl phenone (VI), 2,2',4,4'-tetrahydroxy sebacyl phenone (VII), dodecahydrotriphenylene (VIII), the product from the autocondensation of three molecules cyclohexanone (IX), the product from the autoconden-

Card 1/3

The effect of polyvinyl chloride ...

S/191/62/000/005/002/012
B110/B101

sation of six-molecules cyclohexanone (X), resorcin dibenzoate (XI), resorcin disalicylate (XII), phenyl salicylate (XIII), and β -naphthoxy propene oxide (XIV). The effect of these substances on the stability of powders and plasticized films was determined: (1) according to the decrease of heat resistance of PVC after ultraviolet irradiation, (2) by comparing the rate of separation of HCl during heating of stabilized and nonstabilized PVC before and after ultraviolet irradiation. A measure of the aging stability was afforded by the length of time elapsing before brittleness appeared in the 180° bending test, as well as by the time of irradiation at which the rupture elongation dropped by 50%. IX, X and XIV delayed dehydrochlorination effectively, VI and VII only slightly: concentrations: IX = 0.064, X = 1.130, XIV = 0.050, VI = 0.082, VII = 0.096 g per 10 g PVC; setting in of decomposition: IX = 150°C, X = 158°C, XIV = 169°C, VI = 154°C, VII = 157°C; separated amount of HCl before irradiation (mg HCl/g PVC): IX = 1.94, X = 1.88, XIV = 1.70, VI = 3.48, VII = 3.57; after irradiation: IX = 4.86, X = 4.87, XIV = 4.75, VI = 5.85, VII = 6.50. For a plasticate containing 12 parts by weight of lead silicate and 0.5 parts by weight of an inhibitor mixture, the best heat resistance and fastness to light was found to occur using cyclohexanone stabilizers VIII, IX and X. In this case it was VI, VII and XIV

Card 2/3

POPOVA, Z.V.; YANOVSKIY, D.M.; KOZLOVA, N.V.; KRYMOVA, A.I.

Effect of symmetrical triazine derivatives on the stability of
poly(vinyl chloride). Zhur.prikl.khim. 35 no.1:164-170 Ja '62.
(MIRA 15:1)

(Triazine) (Ethylene)

30909
S/190/61/003/012/003/012
B101/B110

15-8500 2209

AUTHORS: Popova, Z. V., Yanovskiy, D. M.

TITLE: Effect of some stabilizers on the thermomechanical properties of polyvinyl chloride

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 3, no. 12, 1961, 1782 - 1786

TEXT: The relationship between the ability of various stabilizers of inhibiting dehydrochlorination of polyvinyl chloride (PVC) and the thermo-mechanical properties of PVC was studied. PVC type ~~№~~ spetsial'naya (PF special) was used. Stearates of Pb, Ba, Ca, and Cd served as stabilizers (acceptors of HCl), (0.00025 moles per 10 g of PVC). Derivatives of phenols, aromatic ketones, and similar compounds (0.00025 moles per 10 g of PVC) being nonacceptors of hydrogen chloride served as antioxidants. Thermal treatment was carried out at 175°C in the air current (0.2 liters/min), in the nitrogen current (0.2 liters/min), or in evacuated ampoules ($1 \cdot 10^{-3}$ mm Hg). Heating was carried out for 15 - 180 min. The dehydrochlorination rate was determined by a method described

Card 1/4

Effect of some stabilizers...

30909
S/190/61/003/012/003/012
B101/B110

structure of PVC is not preserved. The effects observed were defined as processes of destruction and structuration during heating, and as after-effect of free radicals remaining in PVC after heating. Mentioned are V. A. Kargin, M. N. Shteding (Khim. prom-stl', no. 3, 1955, 137). Some of the antioxidants were made available by Ye. N. Zil'berman and N. A. Rybakova. There are 4 figures, 1 table, and 4 Soviet references.

SUBMITTED: January 2, 1961

Table 1. Effect of antioxidants on the rate of dehydrochlorination of PVC at 175°C. (The rate of dehydrochlorination of nonstabilized PVC was equated to 100%).

Legend: (a) current no.; (b) antioxidant; (c) relative rate of dehydrochlorination of PVC, in the presence and absence of antioxidant, %; antioxidants are (according to current no. of table): I = 2,2',4,4'-tetrahydroxypimelophenone; II = 2,2',4,4'-tetrahydroxyacelaophenone; III = 2,2',4,4'-tetrahydroxysebacophenone; IV = 2,4-dihydroxy-3'-nitrobenzophenone; V = benzophenone; VI = 4-phenylbenzophenone; VII = 2,4-dihydroxyacetophenone; VIII = α,α' -bis-(2,4-dihydroxybenzoyl)-p-xylylene; IX = 2,4-
Card 3/4

26866
S/080/61/034/004/007/012
A057/A129

" 15-8530 also 2209

AUTHORS: Popova, Z. V.; Yanovskiy, D. M.; Zil'berman, Ye. N., Rybakova, N.A.
Ganina, V. I.

TITLE: Effect of some phenols on thermal and photo-decomposition of polyvinylchloride

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 4, 1961, 874 - 881

TEXT: The correlation between the structure of the compound and the effect on the rate of thermal and photo-decomposition of polyvinylchloride (PVC) for some derivatives of 2-oxy-substituted and non-substituted (in the ortho position benzophenones and acetophenones, alkyl- and alkylene resorcinols, as well as some analogous compounds was investigated. It was found that the stabilizing effect is not only due to the absorption ability of ultraviolet light ("filter effect"), but also to the ability to inhibit chain reactions in thermal and photo-decomposition of PVC. The "filter effect is better expressed in compounds containing molecules in which an interaction occurs between carbonyl and hydroxyl groups, resulting in formation of a hydrogen bond. The ability for inhibition of decomposition of PVC by chain reactions is prevalent in compounds containing an

X

Card 1/4

Effect of some phenols on

26866

S/080/61/034/004/007/012

A057/A129

easily mobile hydrogen atom in the hydroxyl group. In prior papers (Ref. 4: Vyso-
komol. soyed., 2,2,210, 1960; and Ref. 5: Doklady Mosk. Mezhdunarod. Simposiuma po
makromol. khim. (Reports of the International Symposium on Macromol. Chem. Moscow),
III, 372, 1960) the present authors demonstrated that ultraviolet light-absorbing
stabilizers (among these benzophenone derivatives) also diminish thermal decompo-
sition of PVC. The ultraviolet spectra of the substances investigated in the pre-
sent work were taken with an SF-4 (SF-4) spectrophotometer. Depending on the ab-
sorption ability concentrations from 0.005 to 0.074 g/l of stabilizers were used.
PVC samples of the "PF-spetsial'naya" (PF-special) resin type with 0.00025 mole
stabilizer per 10 g PVC were investigated. The inhibiting effect on thermal decom-
position of PVC was estimated comparing the dehydrogenation rate by heating sta-
bilized and non-stabilized PVC (Ref. 16: ZhPKh, 33, 1, 186, 1960). The photosta-
bilizing effect was determined by the decrease in thermal stability and increase
in HCl evolution rate of a stabilized and non-stabilized sample after irradiation
by a PRK-2 (PRK-2) ultra-violet bulb (Ref. 16). If v_1 and v_2 are the mean inte-
gral HCl evolution rates until and after irradiation (175°C, 180 minutes in air
stream) of the non-stabilized PVC sample, and v_3 and v_4 of the stabilized sample,
then the ratio v_3/v_1 or v_4/v_2 , respectively, characterize the effect of the sta-
bilizer prior to and after irradiation. On the other hand the ratios v_2/v_1 and
Card 2/4

26866

S/080/61/034/004/007/012

A057/A129

Effect of some phenols on

v_4/v_3 characterize the increase in the dehydrochlorination rate for the non-stabilized and stabilized PVC. The stabilizer has a "filter effect" if $v_2/v_1 > v_4/v_3$, while $v_4/v_3 > v_2/v_1$ indicates that the stabilizer is a photosensitizer. The obtained results demonstrate on a table that the strongest inhibitors for the thermal decomposition of PVC are 2, 4, 6-trioxybenzophenone (III), 1,10-di-(2,4-dioxyphenyl)-decane (XIX) and ethylresorcinol (XVIII). Less effect is obtained with 2,4-dioxybenzophenone (I), 2-oxy-4-methoxybenzophenone (II), 2,2'-dioxy-4,4'-dimethoxybenzophenone (VI), acetophenone (XVI). No inhibiting effect was obtained with 2,4-dioxy-4'-chlorobenzophenone (IV), 2,4-dioxy-3'-nitrobenzophenone (V), 2,4-dioxyacetophenone (VII), 2,2', 4,4'-tetraoxyderivatives of adipophenone (IX), or pimelophenone (X), of azelaophenone (XI), of sebacophenone (XII), 4-phenylbenzophenone (XV), and benzophenone (XIV). Apparently the inhibiting effect is in relation to the mobility of the hydrogen atom in the hydroxyl group. Thus the compounds XIV, XV, XVI and XVII do not have hydroxyl groups and also no inhibiting effect on thermal decomposition of PVC. In the compounds I, II, IV, V, VII, IX - XII and α, α' -di(2,4-dioxybenzoyl)-p-xylylene (XIII) cyclization is possible by interaction of the hydroxyl group (being in ortho position) with the carbonyl group. Cyclization diminishes the mobility of the hydrogen atom in the hydroxyl group, thus effecting a decrease in the inhibition effect of these compounds.

Card 3/4

26866

S/080/61/034/004/007/012

A057/A129

Effect of some phenols on

Molecules of XVIII and XIX contain a mobile hydrogen atom which does not react with the carbonyl group. This explains the higher inhibiting effect of these compounds in relation to VII and XII. The high effect of III is caused by the two hydroxyl groups being in ortho position to the carbonyl group thus having a weakend cycle. The greatest "filter effect" is shown by diphenyl (XVII), 2,2', 4,4'-tetraoxy-derivatives of adipophenone (IX), of pimelophenone (X), (XI), (XII) and also (V). No effect was shown by (III), (XVI) and (XVIII). Stabilizers with a strong "filter effect" have an intensive light absorption in the range of 2,200 - 3,300 Å. There are 2 tables and 17 references: 8 Soviet-bloc and 9 non-Soviet-bloc.

SUBMITTED: July 9, 1960

Card 4/4

158050

2400

S. 1000, 100-112/100
D. 1000

AUTHORS: Popova, Z.V. and Yanovskiy, D.M.

TITLE: The synergic effect of stearates of certain metals in the stabilization of polyvinylchloride

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 6, 1961, 1324-1327

TEXT: Reference is made to an earlier paper by D.M. Yanovskiy et al. (Ref. 1: ZhPKh, 1959, vol. 31, No. 1, p. 1575) which studied the stabilizing effect of Pb, Ba, Ca, Cd and Zn stearates and their synergic effect in thermal breakdown of chlorinated polymers. The present paper studies the effect of stearates and mixtures of them on the rate of dehydrochlorination of PVC during thermal breakdown and the relation between synergic effect and ability to link with HCl molecules. The same metal stearates were used as in (Ref. 1; B. Henderson, Can. Plast., November, 66, 1957). Thermal breakdown of PVC was studied in an air current at 175°C, using PVC resin

Card 102

24009

S-08C/61/004-006-012/020
D2477/D305

The synergic effect of ...

type "PF-special", of which the absolute viscosity in 1% solution in dichloroethane was 2.15 poises. The promotion effect of Cd stearate decreases in proportion to its concentration increase but, with the addition of 10% of the salt the rate of PVC breakdown remains higher than that of the non-stabilized polymer, this effect being ascribed to the dual character of the Cd stearate on the breakdown process in the presence of oxygen. The rates of acceptance of HCl during thermal breakdown of PVC with stearates and mixtures thereof were determined. For all mixtures examined - except 10% Cd stearate with 1% PE stearate - the acceptor power is higher than the additive value. The synergic effect is thus due to the increased acceptor power of mixtures as compared with the individual stearates and is not due to increase of inhibiting effect on decomposition of the polymer. There are 6 figures and 6 references: 3 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: L.H. Wartman, Ind. Eng. Chem., 1955, vol. 47, no. 5, p. 1013; B. Henderson, Can. Plast., 1957, November, p. 60.

SUBMITTED: April 15, 1960

Card 2/2

POPOVA, Z. V., CAND VET SCI, "SPECIFIC ^{prevention} ~~PROPHYLAXIS~~ OF
NEWCASTLE DISEASE IN ^{the} TADZHIK SSR." STALINABAD, 1960.
^
(UZBEK AGR INST IM V. V. KUYBYSHEV). (KL, 2-61, 216).

-233-

ПОПОВА, З. В.

PHASE I BOOK EXPLOITATION SOV/3984

International symposium on macromolecular chemistry. Moscow, 1960.

Mezhdunarodnyy simpozium po makromolekulyarnoy khimii SSSR, Moskva, 14-18 iyunya 1960 g.; doklady i avtoreferaty. Seatsiya III. (International Symposium on Macromolecular Chemistry Held in Moscow, June 14-18, 1960; Papers and Summaries) Section III. [Moscow, Izd-vo AN SSSR, 1960] 469 p. 55,000 copies printed.

Tech. Ed.: P. S. Kashina.

Sponsoring Agency: The International Union of Pure and Applied Chemistry. Commission on Macromolecular Chemistry.

PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high molecular compounds.

COVERAGE: This is Section III of a multivolume work containing papers on macromolecular chemistry. The articles in general deal with the kinetics of polymerization reactions, the synthesis of special-purpose polymers, e.g., ion exchange resins, semiconductor materials, etc., methods of catalyzing polymerization reactions, properties and chemical interactions of high molecular materials, and the effects of various factors on polymerization and the degradation of high molecular compounds. No personalities are mentioned. References given follow the articles.

Butyev, V. M., A. N. Pravednikov, and S. S. Medvedev (USSR). The Effect of Formic Acid and Formates on the Oxidation of Hydrocarbons and Hydrocarbon Polymers	304
Popova, Z. V., and D. M. Yanovskiy (USSR). Study of the Effect of Some Organic and Organometal Compounds on the Thermal Degradation of Polyvinyl Chloride	372
Wichterle, O., F. Štělka, and P. Čefelín (Czechoslovakia). Degradation of Poly- β -Ciproloctam as a Result of Exchange Reaction Between Amide Bonds	380
Kučera, M., J. Láriková, and M. Jelínková (Czechoslovakia). Neutralization of Residual Catalyst in Polydimethylsiloxane; Effect of Thermal Neutralization on the Thermal Stability of the Polymer	388
Górná, I., O. Melník, and I. Šimáček (Czechoslovakia). Thermooxidational Degradation of Polyesters. Study of Degradation Reactions for Different Types of Linear Polyesters	405
Morvan, M. B., B. M. Karamikova, L. I. Golubenkova, A. S. Strizhkov, L. V. Levantovskaya, and M. S. Kargin (USSR). On the Degradation and Stabilization of Some Polymeric Materials	414
Angert, L. O., and A. S. Kuraminskiy (USSR). Investigation of the Efficiency of Inhibitors of Rubber Oxidation at Various Temperatures	421
Fraudestark, J. M., and Ying Wen-K'ang (USSR). Mechanism of the Protective Action of Benzene Rings During the Radiolysis of Polystyrene	431
Zhdanov, A. A., and K. A. Andrianov (USSR). On the Hydrolytic Stability of Side Groups in Polymers with Inorganic Chains of Molecules	440
Berlin, A. A., Ye. A. Penskiy, and G. I. Volkova (USSR). Mechanochemical Transformations and Block Copolymerization During the Freezing of Starch Solutions	448
Vasunov, Kh. U., B. I. Avzhodzhayev, and H. Azizov (USSR). Modification of the Properties of Cellulose by Drifting	449

POPOVA, Z.V.; YANOVSKIY, D.M.

Stabilization of polyvinyl chloride by the products from the
autocondensation of cyclohexanone. *Vysokom. sced.* 2 no.2:210-
215 F '60. (MIRA 13:11)

(Ethylene)

(Cyclohexanone)

BERLIN, A.A.; POPOVA, Z.V.; YANOVSKIY, D.M.

Stabilization of polyvinyl chloride by organotin compounds. Zhur.
prikl.khim. 33 no.4:871-877 Apr '60. (MIRA 13:9)

1. Filial Nauchno-issledovatel'skogo instituta Goskomiteta po
khimii.

(Ethylene)

(Tin organic compounds)

81605

S/190/60/002/02/04/011
B004/B061

5.3831

AUTHORS:

Popova, Z. V., Yanovskiy, D. M.

TITLE:

Stabilization of Polyvinylchloride by Products of the
Self-condensation of Cyclohexanone ¹⁶ ₁

PERIODICAL:

Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 2,
pp. 210-215

TEXT: The authors examined the stabilizing effect of the following self-condensation products of cyclohexanone: 1,2,3,4,5,6,7,8,9,10,11,12-dodecahydrotriphenylene (I); 2-[2-(Δ' -cyclohexenyl)-cyclohexylidene]-cyclohexanone (II), and a condensation product from six molecules of cyclohexanone with a molecular weight of 500 - 550 (III), whose structure was not determined. For comparison, the stabilizing effect of 2-cyclohexylidene cyclohexanone (IV), 2,4-dihydroxybenzophenone (V), 2,4,6-trihydroxybenzophenone (VI), 2,4-dihydroxyacetophenone (VII), and resorcinol dibenzoate (VIII) was tested. The effect of these stabilizers was examined on " $\pi\Phi$ (PF) Special" polyvinylchloride (PVC) as powder or

Card 1/3

X

81605

Stabilization of Polyvinylchloride by
Products of the Self-condensation of
Cyclohexanone

S/190/60/002/02/04/011
B004/B061

plasticized with ED-242. PVC was decomposed in air at 175°C. The duration of the induction period up to the beginning of HCl separation and the ratio $v/v_0 \cdot 100\%$ (v = quantity of HCl resulting from stabilized PVC, v_0 = quantity of HCl resulting from nonstabilized PVC) were determined. The stabilization against light effect was tested with a ПРК-2^{8A} (PRK-2) lamp. Table 1 gives the stabilizing effect of the reagents used, with additions of from 0.00025 M to 10 g of PVC. Fig. 1 shows the inhibiting effect of I, II, and III on the thermochemical decomposition of PVC, and Fig. 2, the dependence of the activity of I, II, and III on the concentration and temperature. It follows from Table 2 that the activity of I, II, and III is not changed by treatment with HCl for ten hours at 175°C, nor by irradiation with a PRK-2 lamp for the same period. These compounds absorbed no chlorine. Tables 3 and 4 give the activity of I, II, III, and IV mixed with lead silicate and calcium stearate in powdered and plasticized PVC. The compounds I, II, and III inhibit the thermal decomposition of PVC, and its decomposition by light. Too high a concentration of these inhibitors can, however, accelerate the

Card 2/3

✕

POPOVA, Z.V.; YANOVSKIY, D.M.

Testing some ethylenimine derivatives as stabilizers for polyvinyl
chloride. Zhur.prikl.khim. 33 no.1:186-190 Ja '60.
(MIRA 13:5)

(Ethylenimine) (Ethylene)

5.3830

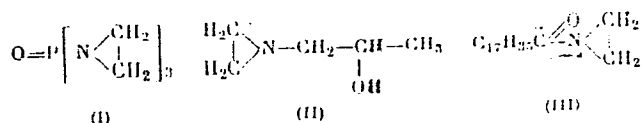
77524
SOV/80-33-1-33/49

AUTHORS: Popova, Z. V., Yanovskiy, D. M.

TITLE: Testing of Some Ethyleneimine Derivatives as Stabilizers of Poly (Vinyl Chloride)

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 1, pp 186-190 (USSR)

ABSTRACT: Stabilizing action of triethylenetriamide of phosphoric acid (I), n-(2-hydroxypropyl)-ethyleneimine (II) and ethyleneamide of stearic acid (III) on poly (vinyl chloride) was studied.



Poly(vinyl chloride) (PVKh) of trade mark "PF-special" in form of powder and plastics was used. The following determinations were made: decomposition temperature (by heating the sample until liberation of

Card 1/5

Testing of Some Ethyleneimine Derivatives
as Stabilizers of Poly (Vinyl Chloride)

77524
SOV/80-33-1-35/89

HCl, which is indicated by turbidity of AgNO_3 solution); thermal stability; and photostability. The latter was determined by the decrease in thermal stability after ultraviolet irradiation and also by a method worked out by the authors. The method is based on the comparison of the rates of HCl evolution on heating the stabilized and nonstabilized samples before and after ultraviolet irradiation. Determinations were made of the ratio of mean integral rates of HCl evolution at 175° in an airflow for 180 minutes for the nonstabilized samples before (v_1) and after (v_2) ultraviolet irradiation, and for the stabilized samples before (v_3) and after (v_4) ultraviolet irradiation.

$\frac{v_3}{v_1} \times 100\%$ characterizes the effect of the stabilizer

on the PVKh decomposition after the irradiation. PRK-2 lamp was used.

Card 2/5

Testing of Some Ethyleneimine Derivatives
as Stabilizers of Poly (Vinyl Chloride)

77524

SOV/80-33-1-33/49

Table 1. Stabilizing action of ethyleneimine derivatives and epoxystearic acid (tested in powder state):
Key to Table 1: (a) stabilizer; (b) quantity of stabilizer on 10 g of PVK; (c) in mole; (d) in %; (e) temperature of decomposition (in ° C); (f) time of irradiation (in hours); (g) thermal stability at 175° (in minutes); (h) mean integral rate of HCl evolution in 3 hours at 175° ($\frac{mg\ HCl}{I\ gPVKh}$); (i) ratio of the rates of HCl evolution on heating the stabilized and non-stabilized polymer (in %); (j) triethylenetriamide of phosphoric acid; (k) N-(2-hydroxypropyl)-ethyleneimine; (l) ethyleneamide of stearic acid; (m) epoxystearic acid; (n) PVKh without stabilizer.

Caption to Table 1, above. See Card 4/5 for Table.

Card 3/5

Testing of Some Ethyleneimine Derivatives
as Stabilizers of Poly (Vinyl Chloride)

77524
SOV/80-33-1-33/49

(a)	(b)		(c)	(d)	(e)	(f)	(g)	(h)	i
	(c)	(d)							
(j)	0.00025	0.0432	183	{	0 4	20 4	—	—	≥ 100 ≥ 100
(k)	0.00025	0.025	180	{	0 4	9 2	7.3 11.4		170 145
(l)	0.00025	0.0772	179	{	0 4	13 3	7.1 15.5		165 196
(m)	0.00025	0.0746	183	{	0 4	14 2	3.2 6.0		75 77
	—	—	168	{	0 4	7 1.5	4.3 7.9		—

Card 4/5

Testing of Some Ethylenimine Derivatives
as Stabilizers of P L₂ (Vinyl Chloride)

77524

307/20-33-1-33/A

The data obtained indicate that I, II, and III show a distinct stabilizing effect on PVK₂. I, II, and III increase the rate of HCl evolution after the end of the induction period of heating the polymer. I, II, and III can be used as additives which intensify the action of other stabilizers. There is 1 table; 2 figures; and 10 references, 3 U.S., 2 B.R., 1 Italian, 3 German, 1 Japanese. The U.S. and U.K. references are: V. Smith, Brit. Plast., 27, 367 (1954); B. Handerson, Canadian Plastics, Nov. 66 (1957); G. H. Taft, Plast Mod., May, 170 (1957); L. N. Wartman, Ind. Eng. Chem., 47, 1013 (1955); A. L. Wilson, Am. Pat. 2475068, 5 VII 1949.

SUBMITTED: April 16, 1959

Card 5/5

USSR/Diseases in Farm Animals. Diseases Caused by Viruses
and Rickettsiae.

Abs Jour: Ref Zhur-Biol., No 5., 1958, 21617.

Author : Popova, Z. V.

Inst :

Title : Atypical Fowl Plague and Poultry Spirochaetosis
in Tadzhikistan.

Orig Pub: S. kh. Tadzhikistana, 1957, No 3, 23-28.

Abstract: No abstract.

Card : 1/1

ZVEREV, M.; POPOVA, Z.V., red.; GIRICHEV, V., tekhn. red.

[Alma-Ata nature calendar] Kalendar' Alma-Atinskoi prirody. Alma-
Ata, Kazakhskoe gos. izd-vo khudozh. lit-ry, 1955. 15 p.
(Alma-Ata Province--Nature) (MIRA 11:8)

POPOVA-BATUEVA, L. V., Asst.
Moscow Veterinary Academy

"Treatment of broncho-pneumonia of piglets with penicillin."
SO: Veterinariya 27(12), 1950, p. 22

- cond. Vet. 1952*
1. POPOVA-BATUEVA, L. V.: SOKOLOV, V. M.:D.V.M.
 2. USSR (600)
 4. Cattle - Diseases
 7. Therapy and preventive treatment in the laziasis of cattle. Veterinariia 29 no. 12, 1952. [p 33]

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

ПОПОВА БАТУЙЕВА, Л. В.
USSR/Medicine - Veterinary

FD-1275

Card 1/1 : Pub. 137-12/17

Author : Popova-Batuyeva, L. V., Candidate of Veterinary Sciences

Title : Effects of Dorogov's antiseptic stimulant (ASD) on animal organism after its intravenous administration and external application

Periodical : Veterinariya, 10, 55-57, Oct 1954

Abstract : The therapeutic value of Dorogov's antiseptic stimulants lies in the fact that they increase the resistance of the animal organism to many diseases of different etiological origin. Intravenous injection of 10% solution of 50cc of ASD produces a clearly defined clinical reaction in animal organism. A 5% solution of 10cc of ASD-P2 yields desired therapeutic results if administered intravenously slowly, through a needle with a narrow opening. Clinical reaction of the organism consists of some rise in temperature and acceleration in the

Institution : Moscow Veterinary Academy

Submitted :

Card 2/2

FD-1275

Abstract : atrioventricular conductivity of the heart. Arterial blood pressure and pulse wave increase as the function of the heart improves. Application of ASD-f3 to the skin results in active hypermia and in local rise in the temperature of the skin: ASD-f3 is absorbed into the blood and is later released with the air exhaled by the lungs.

POPOVA-BATUYEVA, L.V., kandidat veterinarnykh nauk.

Treatment of pneumonia in calves. Veterinariia 31 no.12:30-32
D '54. (MIRA 7:12)

1. Moskovskaya veterinarnaya akademiya.
(CALVES--DISEASES) (PNEUMONIA)

POPOVA-BATUYEVA, L.V., kandidat veterinarnykh nauk.

Some anatomical and physiological data on abnormal twin calves.
Veterinariia 32 no.4:69-71 Ap '55. (MLRA 8:5)

1. Moskovskaya veterinarnaya akademiya.
(TWINS) (ABNORMALITIES (ANIMALS)) (CALVES)

POPOVA-BATUYEVA, L.V.

"Some data on the Application of Radioactive Mineral Sardonix in Veterinary Medicine".

Veterinariya, 33(6), 49-55. June 1956.

(Asst Prof. of the Moscow Veterinary Academy)

Translation of this article in Trans V970, Microfilm No. 9006559.

(The work was introduced to the Lab of Brain Development of the Inst of pediatrics, AMS USSR on December 28th, 1953, at the Academical Conference of the Surgery Section on February 2nd, 1954, at the Conference of Specialists at the Director's of the Main Veterinary Administration of the USSR Ministry of Agriculture on Feb 11, 1956.)

POPOVA-BATUYEVA, L.V., kand.vet.nauk, dots.

Prevention of internal noninfectious diseases in cattle by
systematic examination. Veterinariia 35 no.2:50-55 F '58.

(MIRA 11:2)

1. Moskovskaya veterinarnaya akademiya.
(Cattle--Diseases and pests)

USSR/Diseases of Farm Animals. Non-Contagious Diseases. R-2

Abs Jour : Ref Zhur-Biol., No 18, 1958, 83574

Author : ~~Popova-Batuyeva, L. V.~~

Institute : No institute is given

Title : Prophylaxis of Internal Non-Contagious Diseases in
Cattle by Methods of Dispensarization.

Orig Pub : Veterinariya, 1958, No 2, 50-55

Abstract : No abstract is given

Card 1/1

32

POPOV-CHEKASOV, Igor' Nikolayevich; TURBIN, Boris Sergeevich;
BUZYKIN, Valentin Il'ich; TOLYPINA, O.N., red.;
KARLOVA, L.V., tekhn. red.

[Organization of wages for state farm workers in the
U.S.S.R.] Organizatsiia zarabotnoi platy rabochikh v
sovkhozakh SSSR. Moskva, Ekonomika, 1963. 230 p.
(MIRA 17:1)

POPOVA-CUCU, A. (Bucuresti); ALEXANDRU, M. (Bucuresti)

"The lower limit of the Quaternary and its stratigraphic position in the East European Plain" by V.P. Grichuk. Reviewed by A. Popova-Cucu and M. Alexandru. Natura Geografie 13 no.4:86-89 Jlug '61.

POPOVA-GUTNER, A. F.

57/49T90

USSR/Medicine - Spinal Anesthesia
Medicine - Surgery

Jun 48

"Fractional Anesthesia for Clinical Application,"
A. F. Popova-Gutner, Surg Hosp Clinic, Leningrad
Sanitary and Hygienic Inst of Med, 8 1/3 pp

"Vest Khirurgii" Vol LXVIII, No 6

Method includes: use of fine needles, safe low
puncture level, the Trendelenburg position,
diluted solution of Sovcaine, and gradual anesthe-
sia. Spinal anesthesia using the fractional method
is permissible in clinics.

57/49T90

POPOVA-KIPROVA, Tsv.; SIMONOVA, Iv.

Certain deviations from the classical course in aphthous stomatitis. *Suvrem.med.*, Sofia 6 no.5:58-66 1955.

1. Iz Nauchno-izsledovatel'skiiia institut po pediatriia (direktor dots. As.Pikov)
(STOMATITIS, APHTHOUS.
atypical course)

TATARKO, P., inzh.; POPOVA-KORZYUK, A., inzh.

Design and quality of apartment houses with economical apartments
in Magnitogorsk. Zhil. stroi. no.10:15-17 '62. (MIRA 16:1)
(Magnitogorsk—Apartment houses)

POPOVA-K'YANDSKAYA, Ye.A.

Basic information on the life of A.S.Popov. Izv. LETI no.38:7-14
'59. (MIRA 13:8)

1. Zaveduyushchaya muzeyem A.S. Popova pri Leningradskom elektrotekhnicheskom institute.
(Popov, Aleksandr Stepanovich, 1859-1906)

~~POPOVA-K'YANDSKAYA, Ye.A.~~

Aleksandr Stepanovich Popov was the first elected director of the Electrical Engineering Institute. Izv. LETI no.38:15-26 '59.
(MIRA 13:8)

1. Zaveduyushchaya muzeyem A.S. Popova pri Leningradskom elektrotekhnicheskome institute.

(Popov, Aleksandr Stepanovich, 1859-1906)

POPOVA-K'YANDSKAYA, Ye.A.

A. S. Popov Museum at the V. I. Ul'ianov (Lenin) Institute of Electrical Engineering in Leningrad. Izv. LETI no. 38:52-66 '59.

(MIRA 13:8)

1. Zav. muzeyem A.S. Popova pri Leningradskom elektrotekhnicheskoye institute.

(Leningrad--Museums)

(Popov, Aleksandr Stepanovich, 1859-1906--Museums, relics, etc.)

GRAMMAKOV, A.G.; POPOVA-K'YANDSKAYA, Ye.A.

Scientific and pedagogical activities of Aleksandr Stepanovich
Popov. Izv. vys. ucheb. zav.; radiotekh. 2 no.2:131-145 Kr-Ap
'59. (MIRA 12:7)

1. Leningradskiy elektrotekhnicheskij institut im. V.I. Ul'yanova
(Lenina).

(Popov, Aleksandr Stepanovich, 1859-1906)

POPOVA-K'YANDSKAYA, A.

In the A.S. Popov Museum. NFO no.5:54 My '59. (MIRA 12:8)

1. Zaveduyushchaya muzeyem im. A.S. Popova pri Leningradskom elektrotekhnicheskome institute im. V.I. Ul'yanova (Lenina).
(Leningrad--Galleries and museums)
(Popov, Aleksandr Stepanovich, 1859-1906)

RUSSIAN SCIENTISTS, ~~Y~~ ...

USSR/Scientists - Biography

Card : 1/1 Pub. 118 - 6/15

Authors : Polyakova, N. L. and Popova-K'yanskaya, ~~Y~~ A.

Title : Nikolay Dimitrievich Pal'chikov

Periodical : Usp. fiz. nauk 53/1, 121 - 136, May 1954

Abstract : A biographical sketch of Nikolay Dimitrievich Pal'chikov, a famous Soviet physicist is given together with a list of his works. Most of Pal'chikov's work dealt with geomagnetism, electro-chemistry, atmospheric optics, X-rays and radio-technics. Illustrations.

Institution : ...

Submitted : ...

112-57-8-17432

Translation from: Referativnyy zhurnal, Elektrotehnika, 1957, Nr 8,
p 217 (USSR)

AUTHOR: Popova-K'yanskaya, Ye. A.

TITLE: A. S. Popov at the All-Russian Conferences of Naturalists and
Physicians (From unpublished material). (A. S. Popov na
Vserossiyskikh s²yzdakh yestestvoispytateley i vrachey. Iz
neopublikovannykh materialov)

PERIODICAL: Vopr. istorii yestestvozn. i tekhniki (Problems of Natural
History and the History of Engineering), 1956, Nr 2, pp 189-193

ABSTRACT: A report on activities of A. S. Popov at the 8th, 10th, and
11th All-Russian Conferences of Naturalists and Physicians.

Yu. A. S.

Card 1/1

8(0)

AUTHOR:

Popova-K'yandskaya, Ye. A.

SOV/105-59-3-24/27

TITLE:

Aleksandr Stepanovich Popov - the First Elected Director of the Institute of Electrical Engineering (Aleksandr Stepanovich Popov - pervyy vybornyy direktor elektrotekhnicheskogo instituta)

PERIODICAL:

Elektrichestvo, 1959, Nr 3, pp 94 - 95 (USSR)

ABSTRACT:

This is a short account given of the election of Popov on September 29, 1905, to the post of director of the Institute of Electrical Engineering, which was connected with the first Russian revolution in 1905. It is mentioned that he died January 13, 1906, and also his obituary notice is referred to. There are 1 figure and 2 Soviet references.

Card 1/1

Transactions of the Conference on the Occasion of the 40th Anniversary of the Nizhniy-Novgorod Radio Laboratory named V. I. Lenin, 22-24 May, at Gor'kiy (Radiotekhnika, 13:8, 71-9, '58)

years. Ya. M. Sorin spoke about "The Way From the Oscillating Crystal Receiver to the Transistor". B. L. Lebedev gave a survey of the work in the field of radio measuring technique. L. I. Myasnikov spoke about the work of the scientists of Gor'kiy in the field of radiophysics. The scientific work in the "Scientific Research Institute of Radiophysics" re-organized in 1956 (NIRFI) concentrates on three main lines of development: radio astronomy, electronics, statistical radiophysics and radio spectroscopy. In October 1958 a conference on statistical radiophysics will be convened in Gor'kiy.- A. N. Malakhov spoke about the work of the radio-astronomical expedition of the NIRFI to Southern China. It was a Chinese-Soviet expedition in which also professors and collaborators of the Peking (Peking) and Canton (Kanton) universities as well as of the Institute of Radio-Engineering and Electronics of the Academy of Sciences of China took part. Ya. N. Nikolayev spoke about "The Gor'kiy School of the Theory of Oscillations". D. V. Ageyev spoke about the theme "Subjects Investigated by the Scientific Collaborators of the Faculty of Radio Engineering of the Gor'kiy Polytechnical Institute". Ye. A. Popova-K'yandskaya spoke about the work carried out by A. S. Popov at Nizhniy-Novgorod.

Card 2/4

ПОПОВА-К'ЯНДСКАЯ, Ye.A.

A.S. Popov at all-Russian conventions of naturalists and physicians.
Vop. ist. est. i takh. no. 2: 189-193 '56. (MLRA 10:1)
(Popov, Aleksandr Stepanovich, 1859-1906)

6(0)

06525

SOV/142-2-2-1/25

AUTHORS:

Grammakov, A.G., and Popova-K'yandskaya, Ye.A.

TITLE:

The Scientific and Pedagogic Activities of Aleksandr Stepanovich Popov

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1959, Vol 2, Nr 2, pp 131-145 (USSR)

ABSTRACT:

This article was written on the occasion of the hundredth anniversary of Aleksandr Stepanovich Popov's birthday. He was born on March 16, 1859, in the Urals, in the settlement Tur'inskiy rudnik of the Verkhotur'skiy uyezd. The article covers in detail Popov's scientific education and gives a detailed account of his scientific and pedagogic activities since 1883. Scientific papers and books written by A.S. Popov, as well as experiments performed by him, are listed in detail. A.S. Popov died on December 31, 1905, of a cerebral hemorrhage. There are 2 photographs, 3 diagrams and 16 references, 15 of which

Card 1/2

POPOVA-LATKINA, N.V.

Formation of the shape of the human chest in the embryonic period.
Dokl. AN SSSR 135 no.2:497-500 N '60. (MIRA 13:11)

1. Astrakhanskiy meditsinskiy institut. Predstavleno akademikom
I.I.Shmal'gauzenom.

(EMBRYOLOGY, HUMAN) (CHEST)

POPOVA-LATKINA, N.V.

Development of the axial skeleton and chest during the embryonic
period of man. Biul. MOIP. Otd. biol. 65 no. 6:149-150 N-D '60.
(MIRA 14:2)

(EMBRYOLOGY, HUMAN) (CHEST) (SKELETON)

POPOVA-LATKINA, N.V. (Astrakhan', Elektricheskaya ul.,10,kv.1)

"Human embryology [translated from the English]" by
Bradley Merrill Patten. Reviewed by N.V. Popova-Latkina.
Arkh. anat., gist. i embr. 42 no.4:115-118 Ap '62. (MIRA 15:6)
(EMBRYOLOGY, HUMAN)
(PATTEN, BRADLEY MERRILL)

POPOVA-LATKINA, N. V.
USSR/General Biology - Individual Development.

B.4

Abs Jour : Ref Zhur - Biol., No 7, 1958, 28531

Author : ~~Popova-Latkina, N. V.~~

Inst : -

Title : New Data on Development of Organs in the Human Embryonic Period.

Orig Pub : V sb.: Probl. sovrem. embriologii. L., Un-t, 1956, 278-281

Abstract : Development of vertebrae in human embryos was studied (6.9 - 50 mm in length from tip to occiput) and fetuses from 60 mm in length up to fetuses ready for birth. At the early stages vertebral bodies of different sections are almost indistinguishable; the largest dimension is transverse, the vertebral body has a quadrangular form. The vertebral channel is wide open, vertebral arches are removed from one another for a considerable distance. In fetuses 13-15 mm long the joint and transverse

Card 1/2

15

USSR/General Biology - Individual Development.

B-4

Abs Jour : Ref Zhur - Biol., No 7, 1958, 28531

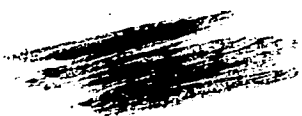
arch appendices are differentiated; however, joint articulation is absent. In fetuses 35 mm long, the vertebral bodies in different sections are well differentiated. Bony extensions are absent, for the arch is not fully locked. Contrary to Nauka's opinion, the author shows that in the "cartilage stage" different vertebrae in various sections may be differentiated by many structural characteristics. Cervical vertebrae in the prochondral stages are provided with processes of rudimentary ribs. The lumbar section is characterized by a larger transverse body and a greater width of arch in the upper lumbar region by comparison with the lower. The author affirms that in the early stages of development the cervical vertebrae in some structural properties are closer to definitive ones than in the middle stages.

Card 2/2

POPOVA-LATKINA, N.V.

Embryonic development of the thyroid gland in man. Dokl.AN
SSSR 124 no.2:493-496 Ja '59. (MIRA 12:1)

1. Astrakhanskiy gosudarstvennyy meditsinskiy institut. Pred-
stavleno akademikom I.I. Shmal'gauzenom.
(THYROID GLAND) (EMBRYOLOGY, HUMAN)



17(1)

SOV/20-124-2-70/71

AUTHOR:

Popova-Latkina, N. V.

TITLE:

On the Problem of the Development of the Thyroid Gland During the Embryonic Period in Man (K voprosu o razvitii shchitovidnoy zhelezy v embrional'nom periode u cheloveka)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 2, pp 493 - 496 (USSR)

ABSTRACT:

Comprehensive publications exist dealing with the thyroid gland during the postembryonic period (Refs 1-3,5-13,15-19), on the other hand, many details concerning its development before birth are missing. As material for the present paper served 8 sections of human embryos of 7-42 mm length and preparations of later stages of fetuses and new born. The thyroid gland is formed and developed at a relatively late period. Heart, liver, lungs and other organs are at that time already well developed. The rudiments of the thyroid gland are not paired. Its shape does not correspond to the final shape. The development of the isthmus takes place only in older fetuses (400 mm length). The thyroid gland arrives at its largest relative size at the beginning of the third month

Card 1/2

On the Problem of the Development of the Thyroid Gland
During the Embryonic Period in Man

SOV/20-124-2-70/71

of its embryonic life. At that time it has the shape of a large half-cyclic organ. At the end of the second month the gland consists of small lobes, as can be seen under the microscope. The lobes decompose into complexes of cells looking like firm cords or small islands. In their interior small cavities are visible. The first follicles appear towards the ninth week of embryonic life and are of different shape and size. Based upon a number of morphological features the author is of the opinion that the thyroid gland in fetuses is an organ which excretes secretions. The beginning of the secretive activity coincides with the end of the third and the beginning of the fourth month of embryonic life. There are 3 figures and 19 references, 15 of which are Soviet.

ASSOCIATION:

Astrakhanskiy gosudarstvennyy meditsinskiy institut (Astrakhan' State Medical Institute)

PRESENTED:

February 6, 1958, by I. I. Shmal'gauzen, Academician

SUBMITTED:

February 5, 1958

Card 2/2

1953-1954, p. 1.

1953-1954, p. 1. - "The development of the human brain in the fetus and in man". 'Soviet Science', 1953. Academy of Sciences, USSR. (Abstract of the 1st International Conference on the Development of the Brain, Moscow, 1953. (Dissertation for the degree of Doctor of Medical Science.)

See: Brain Development, No. 13, 17 October 1953. Moscow

POPOVA-LATKINA, N.V., prof. (Astrakhan')

Development of endocrine glands in human embryos and fetuses.
Probl. endok. i gorm. 10 no.1:3-9 Ja-F '64. (MIRA 17:10)

1. Kafedra normal'noy anatomii (zav. - prof. N.V. Popova-Iatkina)
Astrakhanskogo meditsinskogo instituta.

POPOVA-LATKINA, N.V.

Problem of the development of the thorax during the intrauterine development in man. Arkh.anat.,gist. i embr. 46 no.5:43-49 My (MIRA 18:2) '64.

1. Kafedra normal'noy anatomii (zav. - prof. N.V.Popova-Latkina) Astrakhanskogo gosudarstvennogo meditsinskogo instituta. Adres avtora: Astrakhan', Meditsinskiy institut, kafedra normal'noy anatomii.

POPOVA-LATKINA, N.V.

Mechanisms of the origin of congenital anomalies and monstrosities.
Dokl. AN SSSR 161 no.2:493-496 Mr '65.

(MIRA 18:4)

1. Astrakhanskiy meditsinskiy institut. Submitted May 21, 1964.

CA POPOVA-MILASHEVSKAYA, V. A.

The pH and chlorides in saliva of carious individuals
V. A. Popova-Milashvskaya (Irkutsk Med. Stomatol.
Inst. J. Stomatologiya 1950, No. 2, 14-16). Carious saliva
is about pH 7.0; variations from 0.35 to 0.5 on either side
are observed. Av. NaCl level is 0.128 g. %, highest being
found in people over 40 years old, who also have the more
alk. saliva. There is a parallel trend of pH and Cl level
G. M. Kosolapoff

MANOLOV, D.G., d-r; POPOVA-~~ADOSLAVOVA~~, L.

Effect of coliphages on the pathogenic Bacillus coli of the O 111 serologic type in the organism of white mice. Trudy epidemiol mikrobiol 8:13-15 '61 [publ. '62].

1. Chlen Redaktsionnoy kollegii, "Trudy Nauchno-issledovatel'skogo instituta epidemiologii i mikrobiologii" (for Manolov).

X

POPOVA-SHALAMOVA, V.V.

Determination of the mobility of bacteria and the short color series.
Lab.delo 6 no.1:44-46 Ja-Fe '60. (MIRA 13:4)

1. Iz oblastnoy sanitrano-epidemiologicheskoy stantsii, Lipetsk.
(BACTERIOLOGY, MEDICAL)

POPOVA-SHALANOVA, V.V.

Some increased speed in setting up Widal's test. Lab. celo 4
no.5:43-44 S-0 '58 (MIRA 11:11)

1. Iz Lipetskoy oblasti laboratorii.
(TYPHOID FEVER AGGLUTINATION REACTION)

POPOVA-VASINA, Ye.T.

Sakhalin Corriedales. Soob.Sakhal.kompl.nauch.-issl.inst.AN SSSR.
~~no. 147-61~~ '55. (MIRA 14:4)

(Sakhalin--Sheep breeds)

RUMANIA / Soil Science. Genesis and Geography of Soils.

J-1

Abs Jour : Ref Zhur - Biologiya, No 16, 1958, No. 72627

Author : Popovat, M.; Cirstea, S.

Inst : Rumanian Academy

Title : Paleopedological Data on the Genesis of Some Modern Soils

Orig Pub : Comun. Acad. RPR, 1957, 7, No 5, 559-566

Abstract : Results are reported of the study of buried soils in the south-eastern part of Olteniya. In the southern part of the right bank of the Oita, on the upper, middle and lower terraces, two horizons are traced of buried ancient soils. On the basis of a comparison of the morphology and some physical-chemical properties of the buried and modern soils, the authors come to the conclusion that the age of the chernozem type soils spread here does not exceed the age of the lower terrace, and that after the formation of the upper terrace and before

Card 1/2

POPOVIC, B.

Industrial methods of enriching lignite. p. 717.
(Tehnika, Vol. 12, No. 5, 1957, Beograd, Yugoslavia)

SO: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, No. 8, Aug 1957. Uncl.

POPOVIC, Bosa; RADOVANOVIC, Miroslav, prof. dr.

Survey of family and collective nutrition of workers of the
"Miholj Samo" factory in Backa Palanka. Med. pregl. 17 no.10:
537-540 '64.

1. Zavod za Higijenu Instituta za zdravstvenu zastitu u Novom
Sadu (Direktor Zavoda: Prof. dr. Miroslav Radovanovic).

POPOVIC, M.

Urging greater production and consumption of fruit. p. 9.
(Poljoprivreda, Vol. 4, No. 12, Dec. 1956, Beograd, Yugoslavia)

SO: Monthly List of East European Accessions (EMAL) Lc. Vol. 6, No. 8, Aug 1957. Uncl.

13

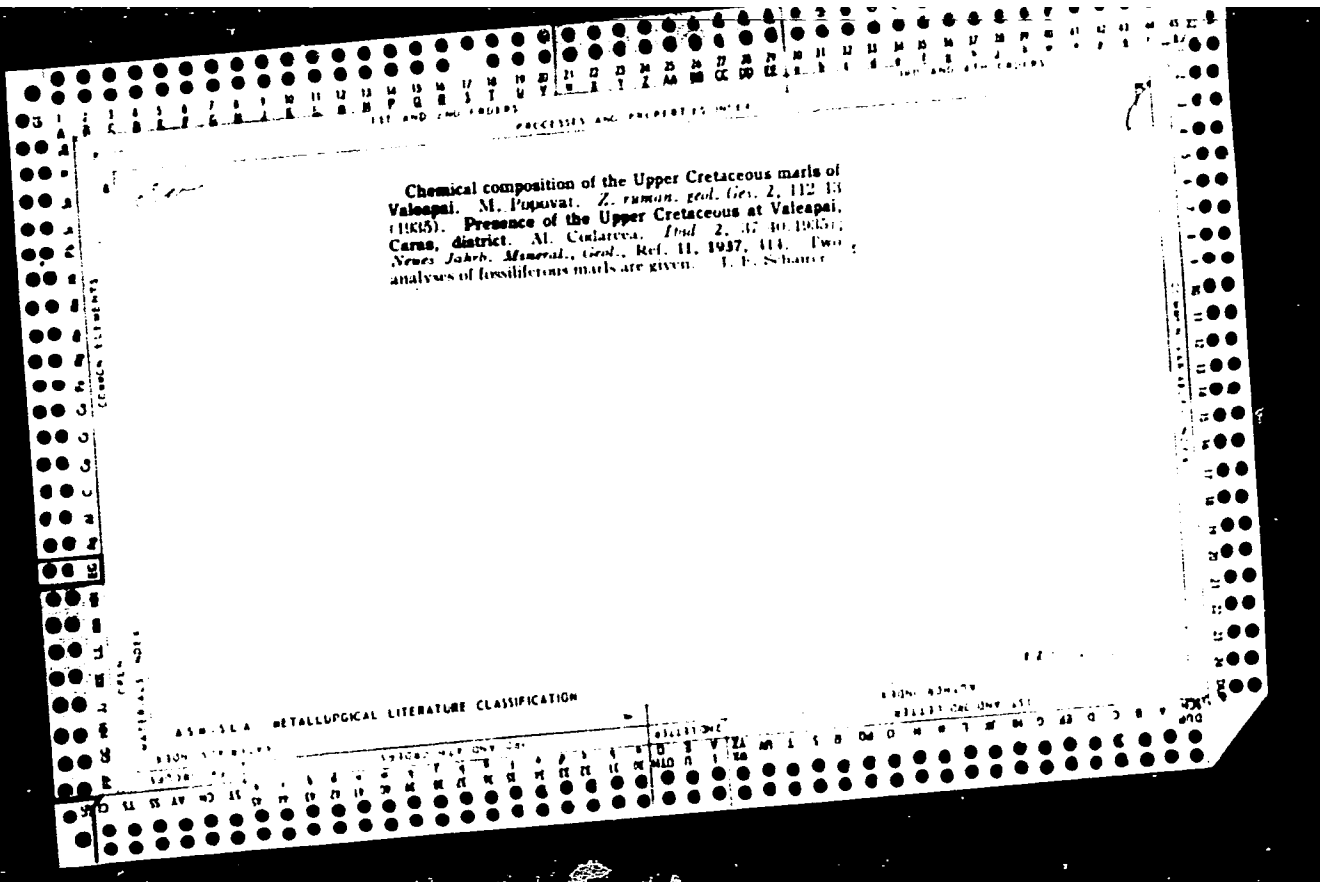
PROCESSES AND PROPERTIES INDEX

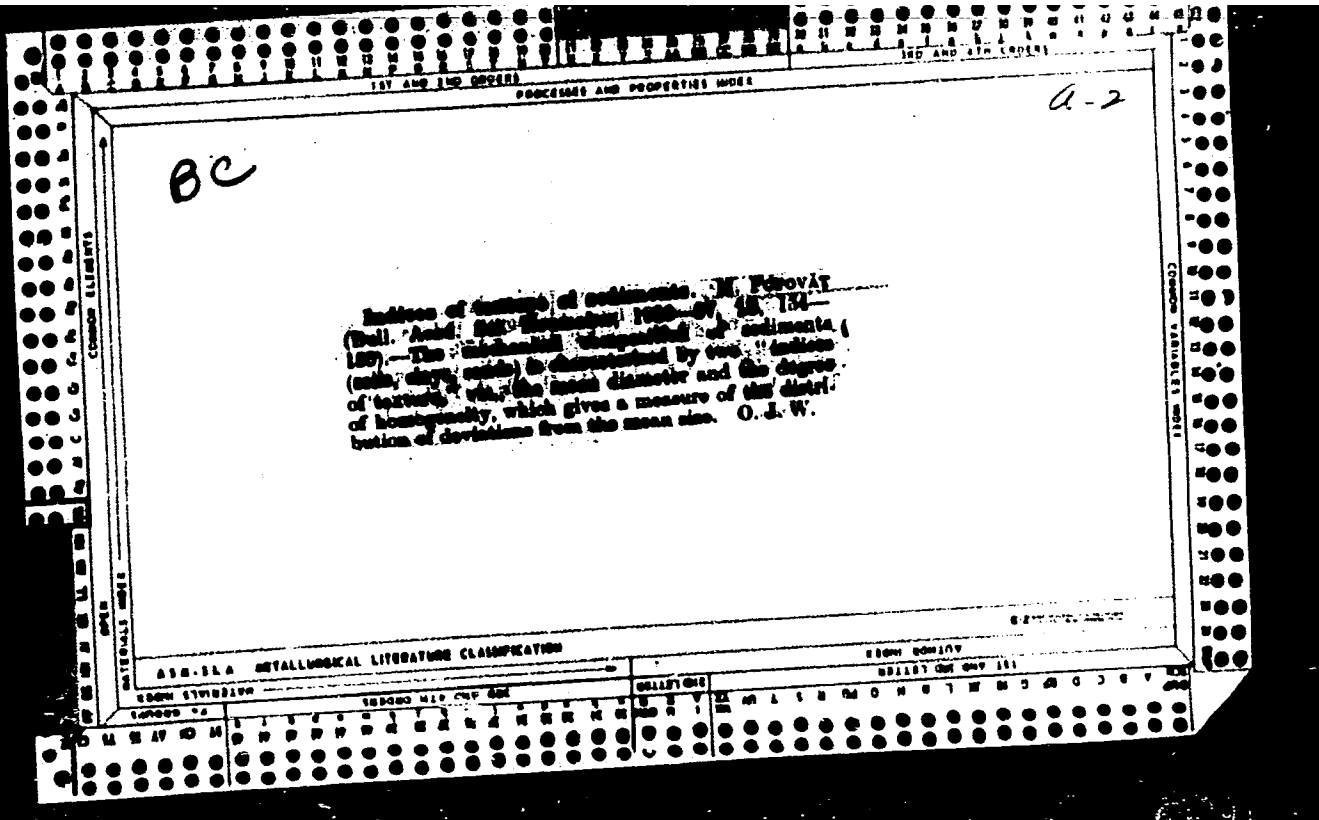
CA

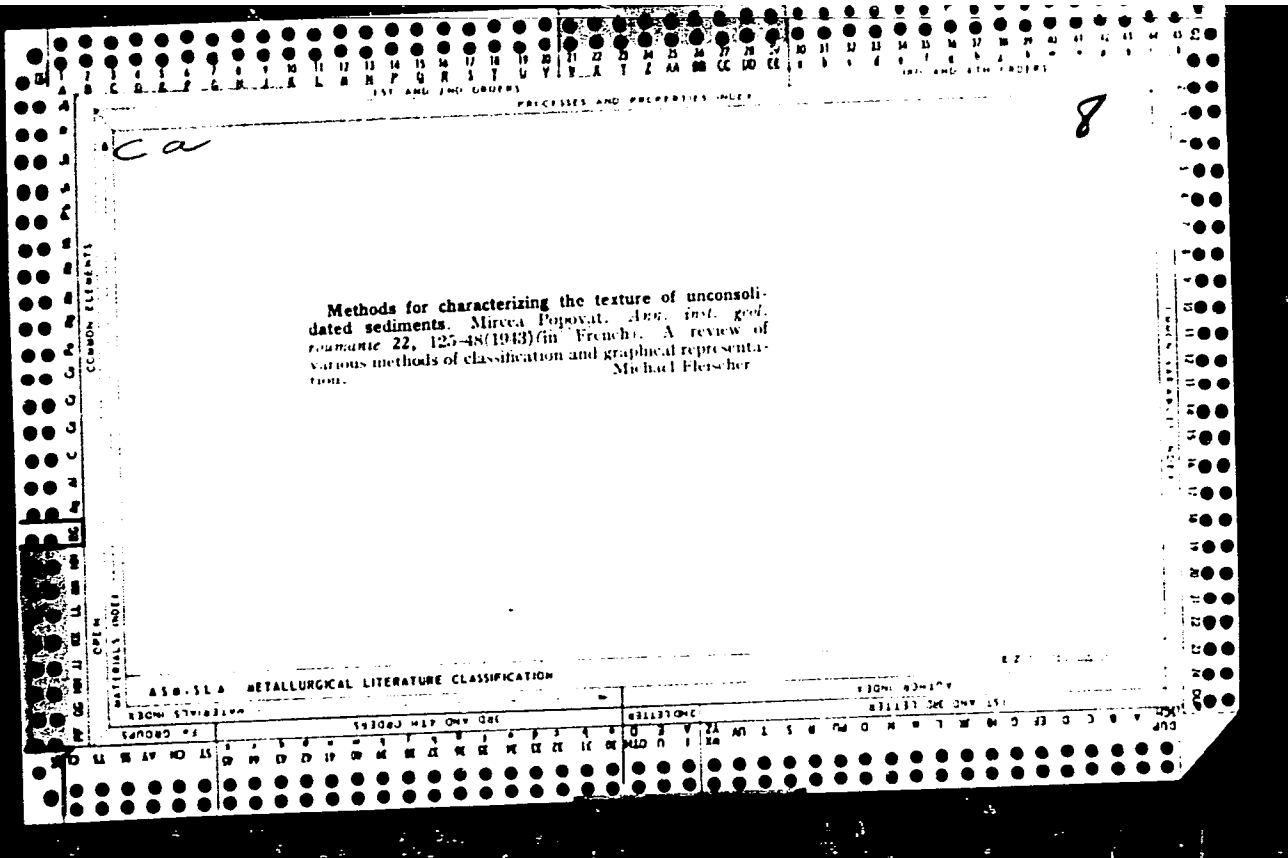
Preliminary investigations on the nitrification of Roumanian soils. Mircea Popovici. *Iasi. geol. Roumanie Comp. rend.* 19, (1935) (1935). The rate of nitrification of different types of Roumanian soils, as such and after addn. of KNO_3 and $(NH_4)_2SO_4$, resp., was studied by bringing to a definite H_2O content (20%), incubating at 33° (the H_2O content was maintained const. by adding H_2O every day to compensate for evapn.), and detg. nitrate at weekly intervals. While the results might at first sight seem to indicate that the loss of nitrate which ultimately takes place is due to insufficient aeration, the fact that at the beginning (14-21 days) there is an increase in nitrate (reaching exceptionally high values for some of the soils) shows that other factors are involved. It is suggested that, with certain of the soils examd., after some time under temp. and moisture conditions favorable to nitrification, some cause arises which opposes nitrification; this cause seems to be hindered by strong aeration. The decrease seems to be produced by a consumption of nitrate, either through reduction or through fixation as complexes by the microorganisms. The nitrate content increases, remains stationary or decreases, according as the nitrifying action is greater than, balanced by or less than the nitrate-consuming process. A. P. C.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

1935







1967, (Bucuresti)

Eighth International Congress of Soil Science. Moscow, 1964.
16 no.6:73-74 N-D '64.

L 38136-66

SOURCE CODE: RU/0024/66/000/002/0020/0027

ACC NR: AP6028688

AUTHOR: Popovat, Mircea (Doctor; Docent; Bucharest)

ORG: none

TITLE: Problems of paleopedology

SOURCE: Natura. Săria geografie-geologie, no. 2, 1966, 20-27

TOPIC TAGS: soil type, paleontology

ABSTRACT: A discussion of the principal types of underground soils, especially fossil ones, and of their origin and evolution. The examples given include the alluvium deposited along river beds, the intercalated underground soils in the loess zone of the Black Sea cliff in Dobrogea Regiune, and other loess soils. The methods used in the study of underground soils are also described. [Based on author's Eng abst.] [JPRS: 36,844]

SUB CODE: 08 / SUBM DATE: none / ORIG REF: 005

Card 1/1

POPOVAT, Mircea; GANCEA, Constantin; PARICHI, Mihai

Soils formed on the aeolian deposits in the area of Cetate-
Dunare-Desnatui (southern Oltenia). Dari seama sed 47:441-456
'59/60 [publ. '62].

POPOVAT, P

300

Popovát, P. Sur une propriété générale de certaines fonctions algébriques. Acad. Roum. Bull. Sect. Sci. 24, 71-78 (1943).

The author establishes analytical conditions (using Montel's regions of monovalence) for an algebraic correspondence $f(x, y) = 0$ between the complex x and y planes to be of the form $A(y)D(x) - B(y)C(x) = 0$ where A, B, C, D are polynomials.

O. F. G. Schilling (Chicago, Ill.)

Source: Mathematical Reviews.

Vol 9 No. 7

POPOVEYENKO, N. I.

POPOVEYENKO, N. I. (Chief Veterinarian, Department of Animal Husbandry, Krasnoarmeyskiy, rayon, Stalin Oblast.) How we are restoring veterinary work.

So: Veterinariya; 23; (10;11); October/November 1946; Uncl.

TABCON

Reel # 440

Popovye en Kg, N.I.

END