Catalytic polymerization of...

was successful with the use of both acids and lyes as catalysts. At first, solubility was not reduced during polymerization, then gel formation occurred. It was found that polyalumino-phenyl cyclosiloxane in the presence of 1 % of NaOH at 120°C polymerizes much more quickly (gel formation within 9 hr, viscosity of the 10 % solution in toluene: 1.9) than polyphenyl cyclosiloxane (gel formation after 15 hr; viscosity: 2.64). Polyalumino-ethyl cyclosiloxane polymerized already after 7 hr, and polyalumino-phenylmethyl cyclosiloxane after 3 hr. In the presence of 1 % of ethyl sulfuric acid, the polymerization of polyalumino-phenyl cyclosiloxane at 120°C took place even more quickly than in the presence of NaOH: gel formation set in after 2 hr, and the relative viscosity increased from 1.45 to 3.91. The polymerization of alumino-organocyclosiloxane takes place gradually by precipitation of gel-forming particles. The chemical composition of the gel differs only little from that of the soluble portion of the polymer. The infrared spectra before and after polymerization showed differences only in the region of the 1060-1115 cm^{-1} band which corresponds to the Si-O bond. The maximum of this band is shifted toward higher values. It is concluded that the polymerization is initiated by the opening of cycles and formation of cross-linked polymer molecules with a marked structure. There are 1 table and 3 Soviet-bloc references.

Card 2/2

ANDRIANOV, K.A.; DZHENCHEL'SKAYA, S.I.; PETRASHKO, Yu.K.

New polymers, products of the catalytic polymerization of organosiloxanes. Plast.massy no.3:20-23 '60. (MIRA 13:6)

(Polymers) (Siloxanes)

87654

15.8116

S/191/60/000/003/005/013
B016/B054

AUTHORS: Andrianov, K. A., Dzhenchel'skaya, S. I., Petrashko, Yu.K.

TITLE: New Polymers of Catalytic Polymerization of Organosiloxanes

PERIODICAL: Plasticheskiye massy, 1960, No. 3, pp. 20 - 23

TEXT: The authors report on a study of catalytic polymerization of cyclic products of the cohydrolysis of phenyl trichlorosilane (PTCS) with phenyl-methyl dichlorosilane (PMDCS), as well as of PTCS with dimethyl dichlorosilane (DMDCS). Besides, they discuss cyclic products with methyl siloxane groups in their rings. Ethyl sulfuric acid was used as catalyst. The ratios of components, and the properties of cohydrolysis products of organosiloxanes are given. Polymerization was conducted at 120°, in some cases at 90°C. From the change in viscosity of 10% solutions of the resulting polymers, the authors conclude that an increasing amount of phenyl-methyl siloxane groups in the cohydrolysis products of PTCS, PMDCS, and DMDCS leads to a slight retardation in ring polymerization. It is shown that the viscosity of solutions

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New Polymers of Catalytic Polymerization of Organosiloxanes

S/191/60/000/003/005/013
B016/B054

of this polymer group (PTCS with PMDCS) at the time of gel formation is lower than that of polymers obtained from cyclic cohydrolysis products. Hence, the authors conclude that, in the cohydrolysis mentioned, rings are formed which partly polymerize under the experimental conditions only on an acid catalyst at increased temperature. On the basis of the infrared spectra (studies by N. P. Gashnikova), the authors conclude that during catalytic polymerization the siloxane chains of the polymer are transformed, and phenyl radicals are partly separated from the silicon atom at the same time. This leads not only to a ramification of the polymer molecules but also to a re-grouping of rings. Polymers with ramified structure have a rather low molecular weight. The thermo-mechanical properties of polymers as observed by G. Ye. Golubkov are given. A comparison of the data obtained clearly showed that an inter-relationship exists between the vitrification temperature and the content of bifunctional components in polymers. Polymers obtained by cohydrolysis of PTCS with PMDCS at all quantitative ratios form, from solutions, brittle films which dry at 20°C. Polymers containing di-methyl siloxane groups form films drying at 200-300°C. The losses in weight during aging at 350 and 400°C for up to 10 days are given.

87654

New Polymers of Catalytic Polymerization of Organosiloxanes

S/191/60/000/003/005/013
B016/B054

Losses slightly increase with an increasing content of phenyl-methyl siloxane groups. Absolute losses, however, are small. The authors mention a paper by K. A. Andrianov and N. N. Sokolov (Ref.7). There are 4 figures, 6 tables, and 7 references: 3 Soviet and 4 US.

X

Card 3/3

ANDRIANOV, K.A.; DZHENCHEL'SKAYA, S.I.; PETRASHKO, Yu.K.

Catalytic polymerization of polyaluminoorganosiloxanes. Plast. massy no.7:20-21 '61. (MIRA 14:7)
(Siloxanes)

PETRASHKO, Yr. K.

S. N. Dzhenchel'shaka, K. A. Andrianov and Yr. K. Petrashko, "The Production of Soluble Polymers with Increased Viscosity."

Report presented at the Second All-Union Conference on the Chemistry and Practical Application of Silicon-Organic Compounds held in Leningrad from 25-27 September 1959.
Zhurnal prikladnoy khimii, 1959, Nr 4, pp 238-240 (USSR)

S/056/62/042/002/055/055
B108/B138

AUTHORS: Ignatenko, A. Ye., Petrashku, M. G., Chultem, D

TITLE: Electron activation of mesic atoms

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 2, 1962, 646-647

TEXT: It is known that the formation and occupation of "holes" on the inner electron shells of atoms leads to multiple ionization, stripping of chemical bonds, and ejection of an atom in the form of a free ion. The study of the atomic charge distribution in radioactive transformations has shown that the atoms lose on the average about 7 electrons when one "hole" is filled up. De Borde (Proc. Phys. Soc., A67, 57, 1954) has shown that cascade transitions of muons in mesic atoms in general lead to an ionization of the inner atomic shells. For instance, the bromine mesic atom may emit about 5 electrons when muons from the shell with principal quantum number n = 14 go over to the ground level. Consequently, the mean charge of ions in the case of mesic atoms can be considerable. The so called electron activation of mesic atoms may lead, for instance, to the transi-

Card 1/3

tion probability R of muons between levels of the hyperfine structure which is determined by the state of the electron shell of the mesic ion at the instant of its decay, depending on the kind of compound the atom in question occurs. If the mesic ion is in a metal, the electron shell will return to its original state after a time t_0 which is small compared with the muon lifetime τ. Owing to the conversion mechanism of the electrons of the atom, R will always be considerably greater than $1/\tau$. In dielectrics on the other hand (e.g. ionic crystals) mesons will behave like impurity centers, such that for them $t_0 \gg \tau$. Considering that the ionization potential of the inner shells increases with a decreasing number of electrons in the atom, one can conclude that R of dielectrics can be much smaller than $1/\tau$. Such considerations may clarify the experimentally established fact that the R's in the mesic atoms of the two phosphorus configurations differ considerably from each other. Taking into account that for mesic atoms of phosphorus the hyperfine structure interaction energy $\Delta W = 185$ ev and that the energy of the L absorption edge of silicon (mesophosphorus) $V_{2S} = 156$ ev, one may conclude that for the black modification (conducting) experimental and calculated values of R will agree with each other. The calculations show that in the mesic atoms of phosphorus $V_{2S} > \Delta W$ already for emissions of

Electron activation of mesic ...

three or four electrons. In red phosphorus (dielectric) where $t_0 \gg \tau$, R is already smaller than $1/\tau$ when one "hole" is formed. It was shown experimentally by L. B. Yegorov et al. (ZhETF, 40, 391, 1961) that the shell has no effect on the polarization of muons in diamagnetic substances. Therefore, it has also no effect in black phosphorus. Experiments with red phosphorus showed a maximum asymmetry of the electrons from $\mu^- \to e^-$ decay at the frequency of the mesic nucleus spin precession, which is half as high as the precession frequency of the spin of the free muon. This indicates that in red phosphorus also the electron shell has no effect on the polarization of the muons. [Abstracter's note: Complete translation.] There are 7 references: 3 Soviet and 4 non-Soviet. The four references to English-language publications read as follows: Beta- and Gamma-Ray Spectroscopy, Ed. by K. Siegbahn, North-Holland Publishing Company, Amsterdam, 1955, pp. 591-594; R. Winston, V. L. Telegdi. Phys. Rev. Lett., 7, 104, 1961; H. L. Donley. Phys. Rev., 50, 1012, 1936; De Borde. Proc. Phys. Soc., A67, 57, 1954.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: November 14, 1961

Card 3/3

Petrashku M. G.

56-2-48/51

AUTHORS: Bogachev, N. P. , Mikhul, A. K. , Petrashku, M. G. , Sidorov, V. M.

TITLE: On the Angular Distribution of the Positive Myons Generated by a (π-μ)-Decay (Ob uglovom raspredelenii μ^+-mezonov ot (π-μ)-raspada)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958, Vol 34, Nr 2, pp 531 - 532 (USSR)

ABSTRACT: First the authors mention several earlier works dealing with the same subject. The present work gives the results of the examination of 10.000 (π-μ)-decay processes of positive myons which came to a standstill in an НИКФИ emulsion of the P type. The emulsions were irradiated in a positive beam of the synchrocyclotron of the Laboratory for Nuclear Problems (Laboratoriya yadernykh problem) and during their exposure they were encased within a steel screen which protected them against the action of the exterior magnetic field. The (π-μ)-decay processes were observed by means of an examination with the МБИ-3 microscope with about 100-fold en-

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On the Angular Distribution of the Positive Myons Generated by a $(\pi - \mu)$-Decay

largement. The angular distribution resulting immediately on inspection is shown in a diagram. The asymmetry coefficient of this angular distribution is b = - 0,048 ± 0,020. Then the authors shortly report on the estimate of systematical errors. The probability of the observation of a $(\pi - \mu)$-decay process decreases within the range of small values of the angle θ^* between the final direction of the positive pion and the initial direction of the positive myon. The distribution determined by direct observation was corrected taking into account the registration probability and the experimentally determined distribution of the angles between the initial direction and the final direction of the positive pions. The corrected distribution of positive myons through the projections of the angles is shown in a diagram. The coefficient of asymmetry of this angular distribution is b = + 0,009 ± 0,018. Therefore the angular distribution of that part of positive myons which are generated by the $\pi - \mu$-decay of the positive pions which had come to a standstill is isotropic. The cause for the asymmetry observed in some works can at least partly be connected with a systematical error investigated in this work. There are 2 figures,

On the Angular Distribution of the Positive Myons Generated by a (π-μ)-Decay 56-2-48/51

and 5 references, none of which is Slavic.

ASSOCIATION: United Institute for Nuclear Research
(Ob"yedinennyy institut yadernykh issledovaniy)

SUBMITTED: December 4, 1957

AVAILABLE: Library of Congress

1. Myons-Scattering 2. Synchrocyclatron-Applications 3. Emulsion irradiation-Processes

Card 3/3

21(8)

AUTHORS: Mikhul, A. K., Petrashku, M. G. SOV/20-124-1-18/69

TITLE: The Fission of U^{238} by μ^--Mesons (Deleniye U^{238} μ^--mezonami)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 1, pp 66-68 (USSR)

ABSTRACT: The possibility of such a fission was predicted by U. A. Wheeler (Ref 1). In principle, the following 2 processes may compete with each other: a) Capture of the negative muon on one of the optical trajectories and the following transitions to the states 2s - 2p - 1s, in which an energy of about 7 Mev (i.e. more than the fission threshold value) is liberated. b) Nuclear capture, in which, by the reaction $\mu^- + p \rightarrow n + \nu$ an excitation energy of the nucleus of about 15 Mev is obtained. Short reference is made to several previous papers dealing with this subject. In the present paper 26,975 processes of stopping negative muons in plates prepared with uranyl were investigated. Method of investigation: 200 NIKFI-R micron-plates were at first saturated with water for 25 minutes, after which they were kept for 40 minutes in a saturated acetic-acid uranyl solution. They were then dried for one hour and irradiated with negative muons for 3 hours; this was done in a

The Fission of U^{238} by μ^--Mesons

SOV/20-124-1-18/69

$\pi^- + \mu^-$-meson beam on the synchrocyclotron of the Ob"yedinennyy institut yadernykh issledovaniy (United Institute for Nuclear Research). The negative pions (150 Mev) were filtered by means of a copper block. A total of 59 cases of fission was found. In 4 cases the track of the meson ended in a star with 4 rays. The upper limit of the admixture of negative pions was estimated at 0.002 ± 0.001. In the case under investigation 0.5 fissions out of a total of 59 were caused by negative pions. The probability P, with which a negative muon which was stopped in the plates caused fission, is equal to $(2.2 \pm 0.3).10^{-3}$. In all cases the ranges of the fission fragments were measured with an accuracy up to $\pm 1\mu$. A histogram shows the ratios of the ranges of the two fragments, and another shows the differences of the distances between the fragments. Analysis of results: the experimentally determined probability makes it possible to calculate the fission probability P_f from the ratio $P_f = P/0.4\ P_c$ if certain conditions concerning the probability P_c of the capture of a negative muon by an atom are made. P_c was calculated according to the Fermi-Teller law (Ref 12) and on the basis of experimental results obtained by

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The Fission of U^{238} by μ^--Mesons

SOV/20-124-1-18/69

J. C. Sens et al. (Ref 13). In these two cases the values 0.08 ± 0.01 and 1.13 ± 0.14 are obtained for P_f. Discussion: A rigorous analysis of the fission of uranium by negative muons is impossible because experimental data for atomic capture in the case of large Z are not available. On the basis of the afore-mentioned histograms it might be concluded that the initially mentioned process a) occurs in 20% of cases. In process b) the value 0.06 is found as a rough estimate for the fission probability of Pa^{238}. The authors thank Kh. Khulebey; V. P. Dzhelepov, A. Ye. Ignatenko, and V. M. Sidorov for their constant interest in the present paper and for useful discussions; they further thank M. Antonova and V. Vasilenko for their help in looking through the plates. There are 1 figure and 17 references, 2 of which are Soviet.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy(United Institute for Nuclear Research)

PRESENTED: August 29, 1958, by V. I. Veksler, Academician

SUBMITTED: August 26, 1958

Card 3/3

PETRASCU, M.

KOZHOKARU, V. [Cojocaru, V.]; PETRASHKU, M. [Petrascu, M.]

Angular correlation of successively emitted gamma rays due to the 440-337 Kev. transition in the Sm^{150} nucleus. Zhur. eksp. i teor. fiz. 44 no.4: 1141-1143 Ap '63. (MIRA 16:4)

1. Institut atomnoy fiziki, Bukharest.
(Samarium) (Gamma rays—Spectra) (Quantum theory)

YEGOROV, L.B.; ZHURAVLEV, G.V.; IGNATENKO, A.Ye.; LI SYUAN-MIN; PETRASHKU, M.G.; CHULTEM, D.

Investigating the paramagnetism of μ-mesonic atoms. Zhur. eksp. i teor. fiz. 40 no.2:391-399 F '61. (MIRA 14:7)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Mesons)

BELOVITSKIY, G.Ye.; KASHCHUKEYEV, N.T.; MUKHUL, A.; PETRASHKU, M.G.; ROMANOVA, T.A.; TIKHOMIROV, F.A.

Mechanism of uranium fission induced by slow μ^--mesons. Zhur.eksp.i teor.fiz. 38 no.2:404-408 F '60. (MIRA 14:5)

1. Ob"yedinennyy institut yadernykh issledovaniy i Fizicheskiy institut im. P.N.Lebedeva Akademii nauk SSSR.
(Uranium--Isotopes) (Mesons) (Nuclear fission)

S/056/63/044/004/003/044
B102/B186

AUTHORS: Koshokaru, V., Petrashku, M.

TITLE: Angular correlation of cascade gamma quanta of the 440 - 337 kev transition of the Sm^{150} nucleus

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 44, no. 4, 1963, 1141 - 1143

TEXT: Tablets pressed from samarium oxide (10 mm in diam, 1 mm height) were exposed to a collimated thermal neutron beam from a BBP-C-2 (VVR-S-2) reactor. The angular correlation of the cascade gamma quanta emitted in E_{II}-E_I-E_o transitions (E_{II} = 777 kev, E_I = 337 kev) by $_{62}Sm^{150}$ nuclei was measured for the angles 90, 135 and 180° using a 400-channel analyzer. The transition characteristics were: 2(0.72E2 + 0.28M1) 2(2)0; 2(0.99E2 + 0.01M1)2(2)0; 3(0.98E2 + 0.02M1)2(2)0. From the amounts of M1 admixture and the counting rate ratios W(ϑ)/(W(π/2)-1) (which were 0.082 ± 0.020 for 135° and 0.170 ± 0.015 for 180°; they are also compared with theoretical values (ANL-5324, 1954), the spin of the 777-kev level was determined to be 4. There are 3 figures and 1 table.

Card 1/2

Angular correlation of cascade...

ASSOCIATION: Institut atomnoy fiziki Bukharest. (Institute of Atomic Physics, Bucharest)

SUBMITTED: October 25, 1962

Card 2/2

PETRASHKU, M.

YEGOROV, L.B. IGNATENKO, A.E., KUPTSOV, A.V., PETRASHKU, M.

"Search for Anomalies in Mu Meson Decay in Mesonic Atoms of the FE Group Transition Metals"

report presented at the Intl. Conference on High Energy Physics, Geneva, 4-11 July 1962

Joint Institute for Nuclear Research
Laboratoryeof Nuclear Problems

PETRASHKU, M.G.

YEGOROV, L.B.; IGNATENKO, A.Ye.; KUPTSOV, A.V.; PETRASHKU, M.G.

Search for anomalies of μ^--meson decay in paramagnetic metals. Zhur. eksp. i teor. fiz. 43 no.3:873-876 '62. (MIRA 15:10)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Mesons—Decay) (Paramagnetism)

YEGOROV, L.B.; IGNATENKO, A.Ye.; KUPTSOV, A.V.; PETRASHKU, M.G.

Anomaly in μ^--meson decay in mesic atoms of transition metals of the iron group. Zhur. eksp. i teor. fiz. 43 no.4:1149-1153 O '62. (MIRA 15:11)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Mesons—Decay) (Transition metals)
(Iron group)

YEGOROV, L.B.; IGNATENKO, A.Ye.; KUPTSOV, A.V.; PETRASHKU, M.G.; SARANTSEVA, V.R., tekhn. red.

[Search for anomalies in μ^--meson decay in paramagnetic metals] Poiski anamalii pri raspade μ^--mezonov v paramagnitnykh metallakh. Dubna, Ob"edinennyi in-t iadernykh issl., 1962. 5 p. (MIRA 15:6)
(Mesons--Decay) (Magnetic materials)

YEGOROV, L.B.; IGNATENKO, A.Ye.; KUPTSOV, A.V.; PETRASHKU, M.G.; SARANTSEVA, V.R., tekhn. red.

[Anomaly in μ^--meson decay in mesic atoms of transition metals of the iron group] K voprosu ob anomalii pri raspade μ^--mezonov v mezoatomakh perekhodnykh metallov gruppy zheleza. Dubna, Ob"edinennyi in-t iadernykh issledovanii, 1962. 9 p. (MIRA 15:6)

(Mesons—Decay) (Transition metals) (Iron group)

IGNATENKO, A.Ye.; PETRASHKU, M.G.; CHULTEM, D.

Electron activation of mesic atoms. Zhur. eksp. i teor. fiz. 42 no.2:646-647 F '62. (MIRA 15:2)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Electrons)(Ionization)(Mesons)

41122
S/056/62/043/004/005/061
B102/B180

AUTHORS: Yegorov, L. B., Ignatenko, A. Ye., Kuptsov, A. V., Petrashku, M. G.

TITLE: The anomaly problem in the μ^- meson decay in mesic atoms of transition metals of the iron group

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 4(10), 1962, 1149 - 1153

TEXT: Using scintillation counters with a 128-channel pulse-height analyzer, the ratio between the decay probability of μ^- mesons in mesic atoms and of free μ^- mesons was measured for mesic Fe, Zn, Ni and Cu to verify published experimental results and predictions. The Fe and Zn targets were in the form of sandwiches consisting of ten 15·15 cm^2 plates, separated by Al sheets 0.7 mm thick. The Ni and Cu targets were 15·15 cm^2 plates, 5 g/cm^2 thick. From the time distributions of the μ^- decay electrons, $S = \sum t_i n_i / \sum n_i$ was determined, where n_i is the number of pulses in time t_i. For Fe+Al $S = 0.485 \pm 0.009$ μsec and for Zn+Al, $S = 0.463 \pm 0.008$ μsec. Then

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The anomaly problem ...

with $S(\mathrm{Fe}+\mathrm{Al}) = n_1 S(\mathrm{Fe}) + n_2 S(\mathrm{Al})$,
$S(\mathrm{Zn}+\mathrm{Al}) = n_1' S(\mathrm{Zn}) + n_2' S(\mathrm{Al})$. (5) and

$S(\mathrm{Fe}) = 0{,}201 \pm 0{,}004$, $S(\mathrm{Zn}) = 0{,}161 \pm 0{,}004$, $S(\mathrm{Al}) = 0{,}707 \pm 0{,}002$,

$$\xi = \frac{\Lambda_p(\mathrm{Fe})}{\Lambda_p(\mathrm{Zn})} = \frac{n_1}{n_1'}\frac{n_2'}{n_2}\frac{\Lambda(\mathrm{Fe})}{\Lambda(\mathrm{Zn})}k_1k_2, \quad (6)$$

was calculated. ξ is the μ^- decay probability ratio, $k_{1,2}$ are correction factors.

$\xi = \Lambda_p^-(\mathrm{Fe}) / \Lambda_p^-(\mathrm{Zn}) = 0{,}94 \pm 0{,}05$.
$\xi = \Lambda_p^-(\mathrm{Ni}) / \Lambda_p^-(\mathrm{Cu}) = 0{,}98 \pm 0{,}05$. was obtained. Within the error limits the ξ - values are equal - which indicates the absence of anomalies such as were observed e. g. in Phys. Rev. Lett. 1, 102, 1958; Phys. Rev. 113, 661, 1959; Phys. Rev. 117, 1580, 1960) and that the instrument effect mentioned by Huff (Ann. Physics, 16, 288, 1961) and Chilton (Phys. Rev. Lett. 7, 31, 1961) cannot be the cause of the anomalies observed by those writers.
There are 4 figures.

Card 2/3

S/056/62/043/004/005/061
B102/B180

The anomaly problem ...

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: April 23, 1962

Card 3/3

L 51865-65 EWT(m)/EWG(m) RWH/GS/RM

ACCESSION NR: AT5002661 S/0000/64/000/000/0062/0066

AUTHOR: Shrubovich, V. A.; Chernyavskiy, G. V.; Petrashenko, A. A. 14 13 B+1

TITLE: Ion exchangers based on polymaleic anhydride

SOURCE: AN UkrSSr. Institut khimii vysokomolekulyarnykh soyedineniy. Sintez i fiziko-khimiya polimerov; sbornik statey po rezul'tatam nauchno-issledovatel'skikh rabot (Synthesis and physical chemistry of polymers; collection of articles on the results of scientific research work). Kiev, Naukova dumka, 1964, 62-66

TOPIC TAGS: crosslinked polymer, ion exchange resin, polymaleic anhydride, ethylene glycol crosslinking, hexamethylene diamine crosslinking

ABSTRACT: Crosslinked polymers were obtained by treating polymaleic anhydride with ethylene glycol (10-40 mol. %) or hexamethylene diamine (procedure given). The crosslinked polymers exhibited properties of carboxylic ion exchangers (static exchange capacity up to 12 meg/g dry cationite, dynamic capacity up to 6 in alkaline and 1 meg/g in neutral media). The resins showed high regeneration at room temperature, but were unstable in hot water and hydrolized readi-

Card 1/2

L 51865-65

ACCESSION NR: AT5002661

ly. Maleic anhydride was also copolymerized with N,N'-hexamethylenedimaleic amide (80 hrs, 70-80C, benzoyl peroxide). The crosslinked polymer powders obtained were mechanically unstable and swelled slightly in water. Orig. art. has: 1 table.

ASSOCIATION: Institut khimii vysokomolekulyarnykh soyedineniy AN UkrSSR (Institute of the Chemistry of High Polymers, AN UkrSSR)

SUBMITTED: 22Jun64 ENCL: 00 SUB CODE: GC ,OC

NO REF SOV: 001 OTHER: 002

Card 2/2

PETRASHKO, A.I.; ANDRIANOV, K.A.

Catalytic polymerization of phenyldimethyl siloxane oligomers in the presence of polymetallophenyl siloxanes. Plast.massy no.6:17-20 '64. (MIRA 18:4)

L 54445-65 EWT(m)/EPF(c)/EPR/EWP(j)/T Pc-4/Pr-4/Ps-4 RM/WW

ACCESSION NR: AP5012450 UR/0062/65/000/004/0660/0665

546.287

AUTHORS: Fromberg, M. B.; Petrashko, Yu. K.; Vozhova, V. D.; Andrianov, K. A.

TITLE: Double decomposition of alkyl(aryl)trisodium oxysilanes and methylphenyl dichlorosilane

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 4, 1965, 660-665

TOPIC TAGS: silane, IR absorption spectrum, polymerization, polycondensation, sodium compound

ABSTRACT: The double decomposition of trisodium salts of alkyl(aryl) silantriols and methylphenyl dichlorosilane was studied. In order to use the reaction for obtaining trifunctional splitting of oligomers with functional groups at the ends of the branches, the synthesis was carried out with 1 mole of alkyl(aryl) trisodium oxysilane for 3 moles of methylphenyl dichlorosilane. Sodium salts (obtained by treating alkyl(aryl)polysiloxanes with an alcohol solution of caustic soda) were used. The double decomposition reaction was carried out below 40C with gradual introduction into a solution of methylphenyl dichlorosilane of a suspension of the trisodium salt in toluene. Analysis of the resulting products

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shows them to contain but an insignificant amount of functional groups. The chlorine content was but 0.1% as against an expected 17.17%, on the assumption of the course the reaction would follow. Only traces of the hydroxyl group were detected after treatment with water. These data indicate that the double decomposition does not follow the expected pattern, but that it is apparently accompanied by hydrolytic processes that lead to the formation of cyclic compounds of complex structure. This view is supported by the presence of crystallization water in alkyl(aryl) silantriols. For the double decomposition reactions, sodium salts of methyl, ethyl, and phenyl silantriols were used. These yielded 1,7-dimethyl-3,5,9,11,14,16-hexamethylhexaphenyl bicyclo (5,5,5) octasiloxane; 1,7-diethyl-3,5,9,11,14,16-hexamethylhexaphenyl bicyclo (5,5,5) octasiloxane; and 1,7-diphenyl-3,5,9,11,16-hexamethylhexaphenyl bicyclo (5,5,5) octasiloxane. These compounds are low-viscosity liquids, soluble in benzene, toluene, and carbon tetrachloride, and insoluble in ethyl and methyl alcohols. The composition, structure, and properties of the compounds are tabulated. Infrared spectra of all compounds exhibit an absorption band in the 1080-1090 cm^{-1} region, corresponding to vibration of the Si-O bond in eight-member rings. No characteristic bond for Si-OH was detected. Supplementary experiments on catalytic polymerization and thermal polycondensation demonstrated that the compounds are polymerized by means of 1% NaOH at 800 and that thermal polycondensation, which was

L 54445-65
ACCESSION NR: AP5012450

effected at 220-250C during long periods (up to 30 hours), does not produce changes in properties or composition of the synthesized compounds. These data support the view that the compounds have cyclic structure. Orig. art. has: 2 figures, 1 table, and 2 formulas.

ASSOCIATION: Elektrotekhnicheskiy institut im. V. I. Lenina (Electrical Engineering Institute)

SUBMITTED: 17Apr63 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 003 OTHER: 002

JD

Card 3/3

ACCESSION NR: AP4031179 S/0056/64/046/004/1481/1483

AUTHOR: Kozhokaru, V.; Petrashku, M.

TITLE: Spin of the 1360-keV level of the Sm-150 nucleus

SOURCE: Zh. eksper. i teor, fiz., v. 46, no. 4, 1964, 1481-1483

TOPIC TAGS: samarium 150, 1360 keV level, 1360 keV level spin, γ-ray spectrum, thermal neutron capture, γ cascade transition, angular correlation, angular correlation function

ABSTRACT: An experimental setup previously described by the authors (ZhETF v. 44, 1141, 1963) was used to determine the spin of the 1360-keV level by measuring the angular correlation of the 585--440 keV cascade γ quanta accompanying the capture of thermal neutrons by Sm^{149}. The measurements were made at angles 90, 135, and 180° between detectors. The experimental data agree best with a spin value of 4. Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: None

Card 1/1

PETRASHKU, S.

USSR-RUMANIA/Analytical Chemistry - Analysis of Organic Substances G-3

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 4844

Author : Petrashku, S., Grou, E.
Inst : Academy of Sciences Rumanian People's Republic
Title : Colorimetric Method for the Determination of Dinitrophenols

Orig Pub : Biol. zh. Akad. RNR, 1956, 1, No 1, 263-267

Abstract : Determination of dinitrophenols (I) in insecticidal and herbicidal preparations is based on conversion of I to amino-quinoneimines and a colorimetric determination of the latter in aqeous solution; the corresponding dinitroalkyl phenol is used as a standard. Determinations are made by direct comparison in a Duboscq colorimeter, photoelectric colotimeter of Lang, with a blue filter, FEK-M or Pulfrich colorimeter. For a determination of I a 1-5 g sample is dissolved in 20 ml alcohol and the

Card 1/2 - 56 -

Card 2/2 - 57 -

MOLOTKOV, L. A. and PETRASHOV, G. I.

"On Certain Dynamic Properties of Thin Elastic Layers."

paper presented at the 4th All-Union Conf. on Acoustics, Moscow, 26 May -2Jun 5[illegible].

ACC NR: AP7010682 SOURCE CODE: UR/0089/66/021/003/0197/0201

AUTHOR: Chupka, Sh.; Petrashova, M.; Tsarakh, I.

ORG: Regional Sanitation Epidemiological Station, Bratislava

TITLE: Content of ^{90}Sr and ^{137}Cs in agricultural products during 1963 and 1964 in West Slovakia

SOURCE: Atomnaya energiya, v. 21, no. 3, 1966, 197-201

TOPIC TAGS: agriculture crop, isotope, radioactive fallout, plant circulation

SUB CODE: 02,18,06

ABSTRACT: Analysis of the ^{90}Sr and ^{137}Cs level in agricultural products in West Slovakia during 1963 and 1964 showed the highest content of these isotopes in grain cultures comparatively lower content in leguminous, and the lowest in tuberous plants. The ^{137}Cs:^{90}Sr ratio depended on the sorptive ability of plants and the amount of radioactive fallout in the vicinity of nuclear power plants of the region. Orig. art. has: 7 tables. [NA]

Card 1/1 UDC: 551.577.7:614.776

PETRASOVA, M.; CSUPKA, S.; CARACH, J.

The results of radioactivity measurements of dust and rain falls in western Slovakia in 1961-1963. Cesk. hyg. 9 no.10:595-600 D '64.

1. Oddelenie vdiacnej hygieny [illegible]skej hygienicko-epidemiologickej stanicy, Bratislava.

Country : Czechoslovakia B-5
Category : Physical Chemistry - Crystals

Abs. Jour. : Referat Zhur-Khimiya, No 6, 1959 18280

Author : Petrasova, M.; Madar, J.; Hanic, F.
Institut. :
Title : Crystal Structure of Potassium Metavanadate

Orig Pub. : Chem. zvesti, 1958, 12, No 7, 410-418

Abstract : Roentgenographic study (by the rotation method, Weissenberg's, and precession method) of crystal structure of KVO_3. Parameters of rhombic lattice: a 5.70, b 10.82, c 5.22 A; Z = 4; F.gr. Pmab. Coordinates of atoms were determined by plotting projections of Patterson and Fourier. Complete analogy has been ascertained with the structure of NH_4VO_3. A comparison with the structure of $KVO_3.H_2O$ was made.

Card: 1/1

L 61478-65 EWT(m)/EWA(h) DM

ACCESSION NR: AP5020186 UR/0089/65/018/005/0496/0499

AUTHOR: Chupka, Sh.; Petrashova, M.; Tsarakh, I. 19 B

TITLE: Content of ^{90}Sr in radioactive fallout over west Slovakian territory

SOURCE: Atomnaya energiya, v. 18, no. 5, 1965, 496-499

TOPIC TAGS: strontium, radioactive fallout, isotope, stratosphere, atmospheric radioactivity

ABSTRACT: The absolute and relative content of ^{90}Sr in radioactive fallout was measured at four points of western Slovakia during 1962-1963. A considerable rise in ^{90}Sr content (up to 12%) was observed during November and December 1963. It was concluded that the present radioactive fallout consists of stratospheric origin isotopes with long half life. Orig. art. has: 3 tables, 1 graph.

ASSOCIATION: Oblastnaya san.-epid. stantsiya, Bratislava (District Medical-Epidemiological Station)

SUBMITTED: 22Jul64 ENCL: 00 SUB CODE: NP, ES

NR REF SOV: 000 OTHER: 006 NA

Card 1/1

DYURCHEK, K. [Ďurček, K.]; MINARIK, F.; STANKOVICHOVA, A. [Stankovičova, A.]; PETRASHOVA, M. [Petrašova, A.]; URICHEK, L. [Uriček, L.]

Doses of X irradiation to which patients and medical personnel are exposed during cardiac catheterization. Med.rad. 4 no.10:66-70 O '59. (MIRA 13:2)

1. Iz Instituta gigiyeny truda i professional'nykh zabolevaniy v Bratislave (dir. - doktor med.nauk I. Kldchik).
(HEART CATHETERIZATION)
(RADIOGRAPHY)

YEGOROV, L.B.; ZHURAVLEV, G.V.; IGNATENKO, A.Ye.; KUPTSOV, A.V.; LI SYUAN-MIN; PETRASHKU, M.G.

Investigating the spin dependence of weak interaction in the process $\mu^- + p \rightarrow n + \gamma$. Zhur.eksp.i teor.fiz. 41 no.3:684-691 S '61. (MIRA 14:10)

1. Ob"yedinennyy institut yadernykh issledovaniy.
(Nuclear reactions) (Protons) (Mesons)

S/056/62/043/003/022/063
B102/B104

AUTHORS: Yegorov, L. B., Ignatenko, A. Ye., Kuptsov, A. V., Petrashku, M. G.

TITLE: Search for μ^- decay anomalies in paramagnetic metals

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 3(9), 1962, 873-876

TEXT: The observation of nontrivial effects in μ^- decays caused in mesic atoms by unpaired electrons would be of great use for investigating the magnetic properties of atoms and of hydrides of transition metals. The authors measured the relative μ^- decay probabilities at different numbers of unpaired electrons in mesic atoms of the systems Pd-H and Ti-H. Under identical experimental conditions the following yield ratios were obtained:

$$Y(TiH_{1,8}) / Y(Ti) = 1,00 \pm 0,02,$$
$$Y(PdH_{1,0}) / Y(PdH_{0,6}) = 1,02 \pm 0,02,$$
$$Y(PdH_{0,6}) / Y(Pd) = 0,99 \pm 0,02,$$
$$Y(PdH_{0,8}) / Y(PdH_{0,2}) = 1,01 \pm 0,02.$$

Card 1/3

The equality of the results strengthens the supposition that no effects caused by unpaired electrons are responsible for the increase of the μ^- decay probability in mesic atoms of transition metals of the iron group (Phys. Rev. 113, 661, 1959; 119, 365, 1960). It indicates also a shift of the X-ray frequency emitted in the 2p-1s transitions of the mesic atoms of these metals (C. Scott et al. Chicago, Preprint EFJNS-61-59). There is 1 figure.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: April 23, 1962

Figure. Block diagram of apparatus.
Legend: 1-5 Scintillation counters, 6 - target, 7 - magnetizing coil, 8 - copper filter, 9 - aluminum filter, 10 - anticoincidence circuit, 11 - coincidence circuit, 12, 13 - amplifiers, 14, 15 - shaper, 16 - delay line (0.1 μsec), 17-delay (≥ 1.1 μsec) 18 - trigger, 19, 20 - transmission, 21, 22 - discriminators, 23, 24, 25 - counting devices.

PETRASICS, F.

Design of boilers of medium capacity suitable for firing coal of high calorific value and dust content. Periodica polytechn eng 7 no.3:259-260 '63.

PETRASINOVIC

News from the inland water transportation. Medun transp 8 no.6:442-443 Je '62.

PETRASINOVIC, Bozin, sanitetski potpukovnik, dr.

Correction of vision with eyeglasses and fitness for military service. Vojnosanit. pregl. 19 no.3:225-227 Mr '62.

1. Vojna bolnica u Ljubljani, Ocno odeljenje.
(MILITARY MEDICINE) (EYEGLASSES)

S

PETRASINOVIC, Bozin, sanitetski pukovnik, dr.

General practitioner's errors in the diagnosis and treatment of diseases of the anterior chamber of the eye and their correction. Vojnosanit. pregl. 21 no.4:260-266 Ap '64

1. Vojna bolnica u Ljubljani, Ocno odeljenje.

PETRASINOVIC, D.

Rhine, Main, and Danube, European river trunk line. Medun transp 10 no. 6:432-433 Je '64.

PETRASINOVIC, D.

Conference of the Danubian navigation companies, consignatories of the Bratislava Agreement, held in Odessa. Rechn transp 8 no.11:809-811 N '62.

PETRASINOVIC, D.

The combined railroad-inland water transit set up on an international basis. Medun transp 8 no.10:714-717 O '62.

NEDELJKOVIC, Srecko, dr; JOSIPOVIC, Vladan, doc., dr; DURIC, Vukosava, dr; SPUZIC, Ivan, dr; PETRASKOVIC, Dragoslav, dr; VUJIC, Ljubica, dr

Myocardial infarct in subjects under 40 years of age. Med. glas. 15 no.3:139-144 Mr '61.

1. Interna klinika B. Medicinskog fakulteta u Beogradu (Upravnik: prof. dr R. Berovic) I Dom narodnog zdravlja u Beogradu (Upravnik: dr S. Jancic) Opsta bolnica u Bihacu (Upravnik: dr M. Tatlic)

(MYOCARDIAL INFARCT case reports)

PETRASINOVIC, D.

The 1964 Bratislava Agreement Shipping Conference. Medun transp 10 no.12:34-36 D '64.

IVANYS, E.; DUKOVA, S.; VAHA, J. Technicka spoluprace: [illegible]
STRAKOSCHOVA, L.

Distribution of psychoses registered for psychiatric care in a segment of the inhabitants of a metropolitan area. II. Annual incidence. Cesk. psychiat. 61 no.1:47-57 F'65.

1. Vyzkumny ustav psychiatricky v Praze.

IGNATENKO, A.Ye.;KUPTSOV, A.B.; LI SUANG-MING; PETRASKU, M.G.; YEGOROV, L.B.; ZHURAVLEV, G.V.

Spin dependence of weak interaction in the process $\mu^- + p \rightarrow n + \nu$ Dubna, Izdatel'skii otdel Ob"edinennogo in-ta iadernykh issledovanii, 1961. 13 p. (MIRA 14:10)

(No subject heading)

SELECKY, F.V. MUDr., CSc.; BABULOVA, A.; BURAN, L.; LANGER, J. Technicka spolupraca: VRABLOVA, O.; PETRASOVA, E.; NEMCEK, V.

The cumulative effect of various cardiac glycosides extracted from domestic raw materials. Bratisl. lek. listy 45 no.10: 577-584 31 My'65.

1. Farmacologicky ustav Ceskoslovenskej akademie vied (riaditelka: prof. MUDr. E. Raskova, DrSc.); pracovisko Bratislava (veduci: MUDr. F.V. Selecky CSc.). Katedra patologickej anatomie Lekarskej fakulty Univerzity Komenskeho v Bratislave (veduci: prof. MUDr. M. Brozman, DrSc.).

CSUPKA, S.; PETRASOVA, M.; CARACH, J.

Content of Sr90 and Cs137 in radioactive deposit in 1964.
Cesk. hyg. 10 no.10:615-617 D '65.

1. Oddelenie radiacnej hygieny Krajskej hygienicko-epidemiologickej stanice, Bratislava.

L 24154-66 EWA(h)

ACC NR: AP6011979 SOURCE CODE: CZ/0038/66/000/001/0016/0019

AUTHOR: Csupka, Stefan—Chupka, Sh.; Petrasova, Maria—Petrashova, M.; Carach, Jozef—Tsarakh, Y.

ORG: Regional Hygiene-Epidemiological Station, Bratislava (Krajska hygienicko-epidemiologicka stanica) 26 B

TITLE: Contamination of the biosphere by sup 137 Cs from weapon test fallout 19

SOURCE: Jaderna energie, no. 1, 1965, 16-19

TOPIC TAGS: cesium radioactive fallout, atmospheric contamination, radioactive contamination

ABSTRACT: The concentration of ^{137}Cs in the precipitation on the territory of western Slovakia was measured in 1962 and 1963. The total β-active precipitation had, in 1963, a tendency to decrease. The specific gravity of the semi-monthly activity of ^{137}Cs in the total β activity amounted in 1962 to 0.9% and in 1963 to 3.2%. In 1963 the activity of ^{137}Cs was 1.3 times higher than the ^{90}Sr. The cumulative value of the radiocesium in 1962 to 1963 amounted to 37.8 nC/m^2. This paper was presented by F. Behounek. The authors thank Academician F. Behounek for critical comments and useful advice. Orig. art. has: 2 figures and 2 tables. [NA]

SUB CODE: 18 / SUBM DATE: none / ORIG REF: 005 / OTH REF: 010 / SOV REF: 001

2

Card 1/1 UDC: 546.36.02: 621.039: 614.7(437)

CZECHOSLOVAKIA

PETRASOVA, M; CSUPKA, S; CARACH, J.

Department of Radiation Hygiene KHES (Oddelenie radiacnej hygieny KHES), Bratislava (for all)

Prague, Ceskoslovenska Hygiena, No 10, 1964, pp 595-600

"The Results of Radioactivity Measurements of Dust and Rain Falls in Western Slovakia in 1961-1963."

PETRAŠOVÁ, M.

27 6

The crystal structure of potassium metavanadate, KVO$_3$. M. Petríková, J. Madar, and F. Hanic (Komenský Univ., Slovenská akad. vied, Bratislava, Czech.). *Chem. Zvesti* 12, 710–18(1958)(German summary).—The crystal structure of KVO$_3$ was detd. from Weissenberg and precession patterns. The dimensions of the orthorhombic elementary cell detd. from the precession pictures and from the pictures of rotating monocrystal are: $a = 8.70$; $b = 10.83$; $c = 8.22$ A. The space group is D_{2h}^{16}–*Pnab* and $Z = 4$. The arrangement of atoms in the elementary cell was detd. from the interpretation of Patterson's functions and from the projection of electron density on planes (100) and (001). Its structure is isomorphous to that of NH_4VO_3. Jan Mirka

JL 12

CZECHOSLOVAKIA/Physics of Solid Bodies.- Structural Crystallography E-4

Abs Jour : Ref Zhur - Fizika, No 4, 1959, No 9642

Author : Petrasova M., Mador J., Hanic F.
Inst : Komensky University, Bratislava, Czechoslovakia
Title : Crystalline Structure of KVO_3.

Orig Pub : Chem. zvesti, 1958, 12, No 7, 410-418

Abstract : The crystalline structure of KVO_3 was determined by the methods of Vaysenberg and the precession chamber. A total analogy with the structure of NH_4VO_3 was found. -- Author's resume

Card : 1/1

MINARIK, F.; UHRIK, F.; HRABOVCOVA, A.; PETRASOVA, M.; DOUPOVEC, V.; MORAVKOVA, M.; URICEK, L.

Analysis of gamma-emitters in the fallout on the site of the nuclear electric power plant A-1. Cesk. hyg. 10 no.7:400-403 Ag '65.

1. Ustav hygieny prace a chorob z povolania, Bratislava.

CZECHOSLOVAKIA

CSUFKA, S; PETRASOVA, M; CARACH, J.

Section on Radiation Hygiene (Oddelenie radiacnej hygieny), KHES, Bratislava - (for all).

Prague, Ceskoslovenska hygiena, No 10, December 1965, pp 615-617

"Content of Sr^{90} and Cs^{137} in radioactive deposit 1964."

FEJER, D.; PETRASOVICH, I.

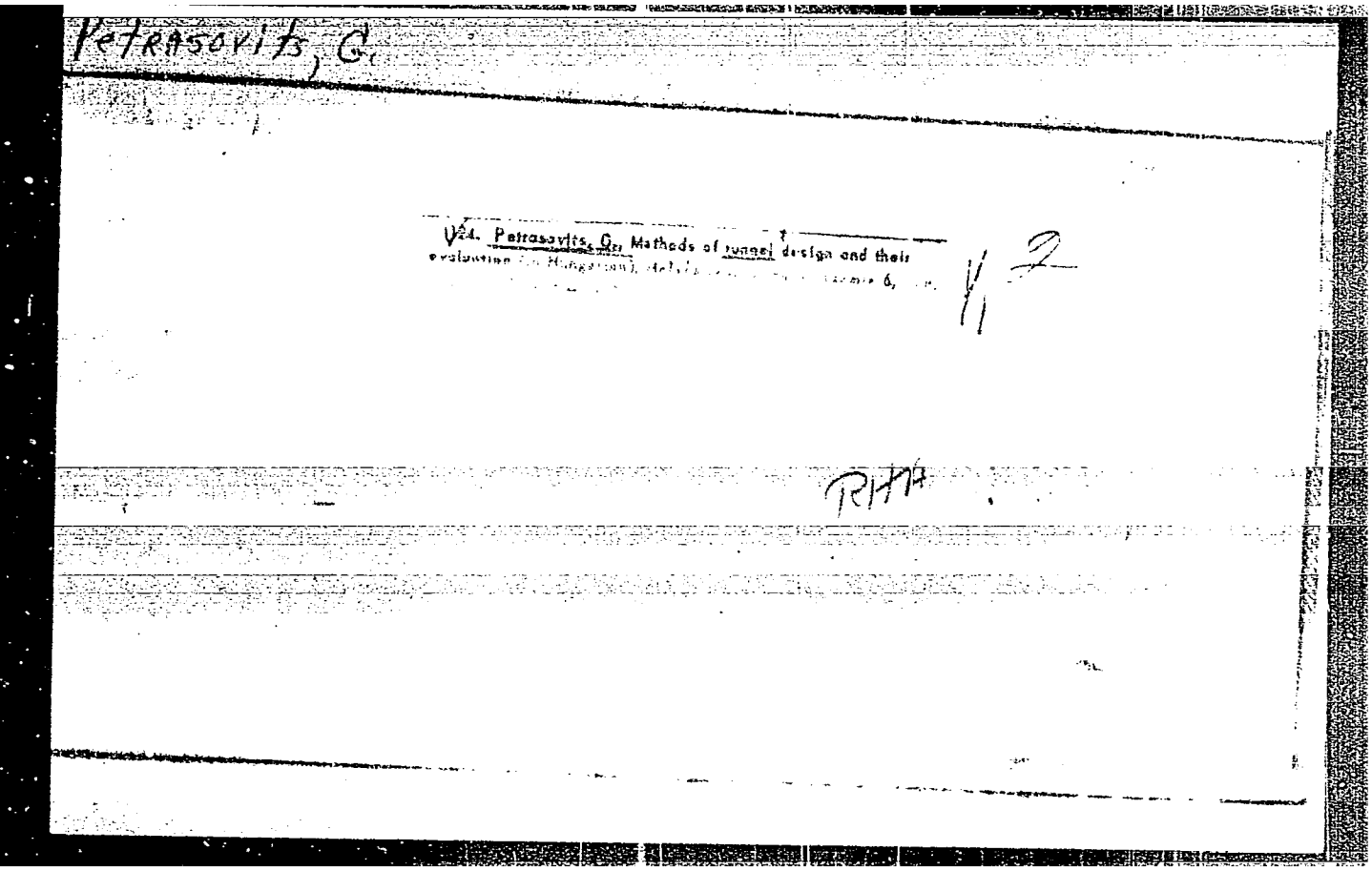
The respiration of rice seedlings. Pt. 2. Acta bot Hung 9 no. 3/4 299-306 '63.

1. Institute of Plant Physiology, Lorand Eotvos University, Budapest.

FEJER, D.; PETRASOVICH, I.

The respiration of young rice seedlings. Pt. 1. Acta bot Hung 9 no.1/2:1-10 '63.

1. Institute of Plant Physiology, Budapest.



Petrasovits, G.

Vol. Petrasovits, G., Methods of tunnel design and their evaluation [illegible], 6, [illegible]. 1/2

RHH

PETRASOVITIS, G.

Methods of designing circular tunnels and evaluating them, p. 321, MELYEPITESTUDOMANYI SZEMLE (Kozlekedsi Kiado) Budapest, Vol. 6, No. 7/8, July/Aug. 1956

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 5, No. 11, November 1956

ACC NR: AT6033338 SOURCE CODE: HU/2504/65/051/03-/0431/0450

AUTHOR: Petrasovits, G.--Petrashovich, G. (Candidate of technical sciences) 27

ORG: Technical University for Construction and Transportation, Budapest B+1

TITLE: Soil stabilization experiments with plastics

SOURCE: Academia scientiarum hungaricae. Acta technica, v. 51, no. 3-4, 1965, 431-450

TOPIC TAGS: soil mechanics, amino resin, soil property

ABSTRACT: Laboratory experiments were conducted to investigate the stabilization of silty and sandy soils with synthetic resins. Various types of urea-formaldehyde and melamine-formaldehyde resins in the 5-15% concentration range were employed. The effects of thermal factors such as freezing and thawing were taken into consideration. It was found that the synthetic resins were generally more suitable soil stabilizers than sodium silicate and are comparable in cost. The soils stabilized with the resins were found to be corrosion-resistant and they maintained a high level of strength for an extended period of time. The experimental techniques and the results obtained were presented in detail. Orig. art. has: 12 figures. [Orig. art. in Eng.] [JPRS: 33,909]

SUB CODE: 08, 11 / SUBM DATE: 02Feb65 / ORIG REF: 002 / SOV REF: 006
OTH REF: 009

Card 1/1 ne

0920 1359

: Botany

: Plant Physiology. Water Conditions.

: Ref Zhur., No.3 1952, No. 10619

: Putrasovitz, I.

: -

: Coefficient of Transpiration in Rice

: Novenytermelés, 1957, 6, No. 1, 203-206

: No abstract.

1/1

16

PETRASOVITS, Imre; BELA, Maria

Effect of certain factors influencing the germinat[illegible] on the quantity of some amino acids. Agrokem talajtan [illegible] 593-598 D '63.

1. Department of Agronomy and Plant Growing, University of Agricultural Sciences, Godoll[illegible].

PETRASOVITS, Imre, a mezogazdasagi tudomanyok kandidatusa

Water tolerance of plants. Hidrologiai Kozlony 39 no.4: 285-288 Ag '59.

PETRASOVITS, Imre, a mezogazdasagi tudomanyok kandidatusa, egyetemi docens.

Academic report on the General Plan for National Water Economy.
Magy tud 71 no.2:113-115 F'64.

1. Agrartudomanyi Egyetem, Godollo.

PETRASOVITS, Imre, dr., a mezogazdasagi tudomanyok kandidatusa

Influence of the depth of ground water on the crop capacity.
Hidrologiai kozlony 40 no.6:504-506 D '60.

PETRASOVITS, Imre; TOTH, Sandor

Rice planting is good if mechanized. Mezogazd techn 3 no. 8: 28-29 '63.

PETRASOVITS, Imre

Water is our great helper. Mezogazd Szemle 1 no.6:1-2 '61.

MIKHUL, A.K.; PETRASHKU, M.G.

Fission of U^{238} by μ^--mesons. Dokl. AN SSSR 124 no.1:66-68 Ja '59.
(MIRA 12:1)

1.Ob"yedinennyy institut yadernykh issledovaniy. Predstavleno akademikom V.I. Vekslerom.
(Mesons) (Uranium--Isotopes) (Nuclear fission)

PETRASOVITS, Geza

An appeal for a contest. Koh lap:Suppl.:Cntode 14 no.8:184 Ag '63.

1. Magyar Tudomanyos Akademia Munzaki Tudomanyok Osztalya szaktitkara.

PETRASYUK, A.A.

Phenomenon of pulse transposition of the retinal arteries in papilledema. Zdrav. Kazakh. 22 no.5:28-31 '62. (MIRA 15:6)

1. Iz kafedry glaznykh bolezney (zav. - prof. V.P. Roshchin) Kazakhskogo meditsinskogo instituta.
(OPTIC NERVE--DISEASES)
(RETINA--BLOOD SUPPLY)
(PULSE)

PETRAUSKAS, A., konstruktor

The Sn-50 engine for light motorcycles. Za rul. 20 no.7:13 Jl '62. (MIRA 15:7)

(Siauliai--Motorcycles)

PETRAUSKAS, A. S.

Cand Med Sci - (diss) "Diuretic and toxic action of mercusal and novurite according to data of clinical and experimental studies." Vil'nyus, 1961. 19 pp; (Ministry of Higher and Secondary Specialist Education USSR, Vil'nyus State Univ imeni V. Kapsukas); 250 copies; price not given; (KL, 6-61 sup, 239)

BODNEVAS, A., red.; VISHOMIRSKIS, R.[Visomirskis, R.], red.; GAL'DIKENE, O.[Galdikiene, O.], red.; MATULIS, Yu. [Matulis, J.], red.; PETRAUSKAS, V., red.; KARVYALIS,V. [Karvelis, V.], tekhn. red.

[Theory and practice of bright electroplating] Teoriia i praktika blestiashchikh gal'vanopokrytii; osnovnye materialy. Vilnius, Gos.izd-vo polit. i nauchn. lit-ry Litovskoi SSR, 1963. 366 p. (MIRA 17:1)

1. Vsesoyuznoye soveshchaniye po teorii i praktike blestyashchikh gal'vanopokrytiy, Vilnius, 1962.

PETRAUSKAYTE, Ye. V., Cand Biol Sci -- (diss) "Fungus diseases of red clover in the Lithuanian SSR and measures in the campaign against some of them." Vil'nyus, 1960. 26 pp (Ministry of Higher and Secondary Specialist Education USSR, Vil'nyus State Univ im V. Kapsukas); 253 copies; price not given; (KL, 17-60, 148)

COUNTRY : HUNGARY
CATEGORY : Cultivated Plants. General Problems. M

ABS. JOUR. : RZhBiol., No. 3, 1959, No. 10856

AUTHOR : Petrasovits, I.
INST. :
TITLE : On the Problems of Irrigated Agriculture in Hungary.

ORIG. PUB. : Agrartudomany, 1957, 9, No. 12, 15-23.

ABSTRACT : No abstract.

CARD: 1/1

NYERGES, Georgette; LOSONICZY, Gy.; ERDOS, L.; PETRASS, Gy.

Significance of haemagglutination-inhibiting antibodies in the evaluation of vaccinial reactions. Acta microbiol. acad. sci. Hung. 11 no.2:139-145 '64.

1. State Institute of Hygiene (Director: T. Bakacs), Budapest, and Laszlo Central Hospital for Infectious Diseases (Director: J. Roman), Budapest.

HUNGARY

MOZSIK, Gyula, JAVOR, Tibor, DOBI, Sandor, PETRASSY, Klara, SZABO, Andras; Medical University of Debrecen, II. Medical Clinic (Debreceni Orvostudomanyi Egyetem, II. sz. Belklinika).

"The Development of Denervational Hypersensitivity in Patients Treated With Atropine."

Budapest, Kiserletes Orvostudomany, Vol XVIII, No 4, Aug 66, pages 353-358.

Abstract: [Authors' Hungarian summary] The parotid secretion of patients under prolonged treatment with atropine was studied before the treatment, during 2-4 weeks of treatment and 3-5 days after its cessation. The basal secretion and the extent of reflex responses to citric acid solutions and to humoral stimulation (acetylcholine, noradrenalin, histamine) were determined. It was found that the inhibitory effect of atropine on the parotid secretion is decreased during prolonged atropine treatment; this is not caused by a decrease in the amount of atropine in these patients. During 2-4 weeks of treatment, basal secretion and response to submaxillar stimulations were greatly increased while the response to supermaxillar stimulation remained largely unchanged. Response to noradrenalin increased greatly, to acetylcholine to a lesser extent. 3-5 days after cessation of the atropine treatment, basal secretion and response to noradrenalin returned to their original level while the response to acetylcholine decreased to a lesser extent. The conclusion was reached that a "pharmacological denervational hypersensitivity" develops during the 2-4 weeks of atropine treatment. 1/2/

S/137/62/000/008/052/065
A006/A101

AUTHORS: Grinkyavichyus, A. A., Petrauskas, S. M.

TITLE: White bronze-plating

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 8, 1962, 127, abstract 8I868 (In collection: "Vopr. usoversh. gal'vanopokrytiy", Vil'nyus, 1961, 81 - 83)

TEXT: An analysis is made of the properties and use of white bronze (45% Sn and 55% Cu). The most expedient conditions of deposition are described. The process is conducted from an electrolyte containing (in g/l) Sn (in stannite form) 30 - 45, Cu (in the form of a complex cyanogen salt) 10 - 15, NaCN (free) 15 - 17, NaOH (free) 5 - 7 at 60 - 70°C, D_c 2 - 3 amp/dm^2; Cu and Sn anodes in a 1 : 1 ratio. At D_c = 2 amp/dm^2 a 10 μ thick layer is formed within 20 minutes. The coating is poreless. Good results were obtained by replacing the method of multi-layer chrome and silver plating by the method of white bronze plating. There are 5 references.

[Abstracter's note: Complete translation] N. Lukashina

Card 1/1

RAGUL'SKIS, Kazimeras [Ragulskis, Kazimieras]; PETRAUSKAS, V., red.

[Mechanisms on a vibrating base; problems of dynamics and stability] Mekhanizmy na vibriruiushchem osnovanii; voprosy dinamiki i ustroichivosti. Kaunas, Akad. nauk Litovskoi SSR, 1963. 231 p. (MIRA 16:6)
(Mechanisms--Vibration)

KRASIL'NIKOVA, G.K., red.; KUGATOVA, G.F., red.; KUCHEROV, V.F., doktor khim. nauk, red.; LAUMYANSKAS, G., red.; PETRAUSKAS, V., red.; SEMENOVSKIY, A.V., red.; VENGRITE, T., red.; PERYAVICHYUS, A., tekhn. red.

[Chemistry of terpenes and terpenoids; papers presented at the All-Union Conference on Problems in the Chemistry of Terpenes and Terpenoids in Vilnius on June 4-6 1959] Trudy Vsesoiuznogo soveshchaniia po voprosam khimii terpenov i terpenoidov, Vil'nius, Gos. izd-vo polit. i nauchn. lit-ry Litovskoi SSR, 1960. 247 p. (MIRA 15:7)

1. Vsesoyuznoye soveshchaniye po voprosam khimii terpenov i terpenoidov, Vilnius, 1959. 2. Zaveduyushchiy sektorom Instituta khimii i khimicheskoy tekhnologii Akademii nauk Litovskoy SSR (for Kugatova).

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KVEDARAS, A., red.; BASALYKAS, A., red.; BERGAS, V., red.; MALDZIUNAITE, S., red.; PETRAUSKAS, V., red.; SIBUTIS, A., red.; ZIEMYTE,E., red.; BANCEVICIUS, P., tekhn. red.

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MATULIS, J., red.; ZIUGZDA, J., red.; JUCYS, A., red.; LASAS, V., red.; KORSAKAS, K., red.; PETRAUSKAS, V., red.; ISKAUSKAS, J., red.; FRIDAITE, I., red.; SARKA, S., tekhn. red.

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1. Lietuvos TSR Mokslu akademija, Vilna.
(Lithuania--Science)

L 46938-66 EWT(1)/EWT(m)/EWP(t)/ETI IJP(c) JD/AT

ACC NR: AP6015492 (N) SOURCE CODE: UR/0181/66/008/005/1616/1617

61
B

AUTHOR: Vishchakas, Yu. K.; Yushka, G. B.; Petravichus, A. D.; Matulenis, A. Yu.

ORG: Vil'nyus State University im. V. Kapsukas (Vil'nyusskiy gosudarstvennyy universitet)

TITLE: The kinetics of forward photocurrent limited by a spatial charge in amorphous selenium

SOURCE: Fizika tverdogo tela, v. 8, no. 5, 1966, 1616-1617

TOPIC TAGS: selenium, photoconductivity, current carrier, hole mobility

ABSTRACT: Amorphous Se with a specific resistivity of 10^{10} ohm·m, a hole drift of $>10^{-7}$ m^2/v, a quantum yield of 0.1 to 1 (photon energy 2.5 to 3.0 ev), and a free-to-capture-holes ratio of >0.01 was examined. The experimental equipment included a pulse light source (ISSh-15, ISSh-100-3), a monochromator, and an oscillograph (input impedance 10 kohm, and capacitance 50 picofarad). Photocurrents were generated by constant voltage and by intermittent light. The density of the maximum photocurrent depends on the voltage, according to

$$j_0 = 1.21 \cdot \frac{9}{8} \varepsilon\varepsilon_0 \mu \frac{U^2}{d^3},$$

Card 1/2

where ε is the relative dielectric constant, ε_0 is the dielectric constant of the vacuum, μ is mobility, U is voltage, and d is the specimen thickness in the direction of the electric field. A possible break in the curve and further linear increase at high voltages indicate that the divergence of the hole current reaches the generation tempo of the carriers. The determined quantum yield agrees with the results obtained by other authors. The calculated curves correspond to a hole mobility $\mu = 1.4 \cdot 10^{-5}$ m^2/v·sec. Trapping and recombination in the specimens are insignificant. Orig. art. has: 2 figures, 2 formulas.

SUB CODE: 20/ SUBM DATE: 20Sep65/ ORIG REF: 001/ OTH REF: 005

Card 2/2

L 46029-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) GD/BC

ACC NR: AT6017616 (N) SOURCE CODE: UR/0000/65/000/000/0226/0230

AUTHOR: Alishauskas, A. V.; Motskus, I. B.; Petraytis, K. A.

21
B+1

ORG: none

TITLE: Establishing an extremum in a multivariable problem of optimal design

SOURCE: Vsesoyuznaya konferentsiya po teorii i praktike samonastraivayushchikhsya sistem. 1st, 1963. Samonastraivayushchiyesya sistemy (Adaptive control systems); trudy konferentsii. Moscow, Izd-vo Nauka, 1965, 226-230

14

TOPIC TAGS: optimization, optimal control system, production engineering

ABSTRACT: The problem of reducing manufacturing errors are minimized by solving a multivariable optimization problem and using various forms of the gradient method. The objective function is formulated using a penalty function, to account for the existing inequality constraints. The four optimization algorithms considered are: 1. relaxation--variation from the initial condition for each variable separately; 2. gradient--at each step, the variation is performed in the anti-gradient direction for a given step size; 3. optimal gradient--gradient, with a step down to the minimum of the objective function in the same direction; 4. accelerated gradient--optimal gradient for the first three steps. Next direction determined the first and third minimum. Graph-

Card 1/2

PETRAYTITE, I.K. (g. Shyaulyay Litovskoy SSR)

Instruments and aids for practical exercises in astronomical clubs. Fiz. v shkole 21 no.6:64-68 N-D '61. (MIRA 14:12)
(Astronomy--Audio-visual aids)

KUBILYUS, Yonas Pyatro[Kubilius, Jonas]; PETRAYTIS, A.[Petraitis, A.], red.; KARVYALIS, V.[Karvelis, V.], tekhn. red.

[Probability methods in the theory of numbers]Veroiatnostnye metody v teorii chisel. 2., dop. izd. Vil'nius, Gos.izd-vo polit. i nauchn. lit-ry Litovskoi SSR, 1962. 220 p. (MIRA 16:3)

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