

SKORYKH, S.S.; PANOV, V.A.; PODORVANOV, A.Z.; GONCHAR, V.G.; KUL'NIDA, V.M.

Ways of improving transportation in an open pit of the Krivoy Rog
Southern Mining and Ore-dressing Combine. Sbor. nauch. trud.
NIGRI no.7:52-59 '60. (MIRA 14:12)
(Krivoy Rog Basin—Mine railroads)

U

ALEKSEYEV, F.K.; ANDRIYUTS, G.L.; ARSENT'YEV, A.I.; ASTAF'YEV, Yu.P.;
BEVZ, N.D.; BEREZOVSKIY, A.I.; GENERALOV, G.S.;
DOROSHENKO, V.I.; YESHCHENKO, A.A.; ZAPARA, S.A.; KALINICHENKO, V.P.;
KARNAUSHENKO, I.K.; KIKOVKA, Ye.I.; KOBOZEV, V.N.; KUPIN, V.Ye.;
LOTOUS, V.K.; LYAKHOV, N.I.; MALYUTA, D.I.; METS, Yu.S.; OVODENKO,
B.K.; OKSANICH, I.F.; PANOV, V.A.; POVZNER, Z.B.; ~~PODORVANOV, A.Z.~~;
POLISHCHUK, A.K.; POLYAKOV, V.G.; POTAPOV, A.I.; SAVITSKIY, I.I.;
SERBIN, V.I.; SERGEYEV, N.N.; SOVETOV, G.A.; STATKEVICH, A.A.;
TERESHCHENKO, A.A.; TITOV, D.S.; FEDIN, A.F.; KHOMYAKOV, N.P.;
SHEYKO, V.G.; SHEKUN, O.G.; SESTAKOV, M.M.; SHTAN'KO, V.I.

Practice of construction and exploitation of open pits of Krivoy
Rog Basin mining and ore dressing combines. Gor. zhur. no.6:
8-56 Je '63. (MIRA 16:7)

(Krivoy Rog Basin—Strip mining)

L 05869-67
ACC NR: AP6029964 (N) SOURCE CODE: UR/0413/66/000/015/0150/0150

INVENTOR: Podorvanov, V. P.

ORG: none

TITLE: High-speed, highly navigable ³⁵cutter. Class 65, No. 184641

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 150

TOPIC TAGS: ~~inland waterway transportation, transportation system,~~
shipbuilding engineering, marine engineering, ~~inland vessel data~~ *ship component*

ABSTRACT: A high-speed cutter (see Fig. 1), provided with a vertical air vane and a horizontal stabilizer, is characterized by supporting

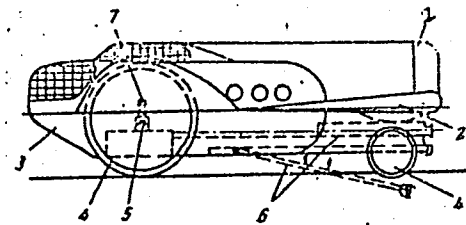


Fig. 1. High speed cutter

- 1 - Vertical air vane; 2 - horizontal stabilizer; 3 - body; 4 - wheels;
- 5 - axle of the forward wheels;
- 6 - driving shaft; 7 - shock absorber.

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L. 05869-67

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surfaces in the form of two pairs of cylindrical wheels for operation above the water's surface. The axle of the forward wheels, located above the center of gravity, supports 70—90% of the cutter's weight; the engine's shaft, perpendicular to the forward axle, creates a moment of forces which continuously press the stern to the water's surface. The wheels' axles are provided with hydraulic or pneumatic shock absorbers. The horizontal stabilizer is inclined 3—10° to the horizontal plane of the cutter. [GE]

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Card 2/2

SHAPIRO, David Moiseyevich; PODORVANOV, Alevtina Ivanovna;
MIRONOV, Aleksandr Nikitovich; BOCHAROVA, Yu.F., red.

[Collection of problems on the strength of materials]
Sbornik zadach po soprotivleniiu materialov. Izd.2.,
perer. Moskva, Vysshiaia shkola, 1965. 359 p.
(MIRA 18:9)

SHAPIRO, David Moiseyevich; PRIKHOD'KO, Aleksandr Nikolayevich;
PODORVANOVA, Alevtina Ivanovna; MIRONOV, Aleksandr Nikitich;
SHELKOV, N.I., red.; GRIGORCHUK, L.A., tekhn. red.

[Collected problems on the strength of materials] Sbornik zadach po soprotivleniu materialov. Moskva, Gos. izd-vo "Vysshaya shkola," 1961. 299 p. (MIRA 15:2)
(Strength of materials—Problems, exercises, etc.)

SHAPIRO, David Moiseyevich; EODORVANOVA, Alevtina Ivanovna;
MIRONOV, Aleksandr Nikitovich; BOCHAROVA, T. F.; red.

[Collection of problems on the strength of materials]
Sbornik zadach po soprotivleniiu materialov. Izd.2.,
perer. Moskva, Vysshaia shkola, 1965. 359 p.
(MIRA 18:5)

ACCESSION NR: AP4043794

S/0188/64/000/004/0014/0022

AUTHOR: Podosenov, S. A.

TITLE: Gas motion in a centrally symmetrical field of gravity

SOURCE: Moscow. Universitet. Vestnik. Seriya 3. Fizika, astronomiya, no. 4, 1964, 14-22

TOPIC TAGS: gravity field, theoretical physics, symmetrical gravity field, planetary nebular, star, red giant, cosmogony, astrophysics, supergiant star, gas motion

ABSTRACT: The problem of the escape of a gas, taking a gravity field into consideration, is of interest in cosmogony and astrophysics because it makes it possible to determine what mass of gas is involved and at what initial energy it can permanently leave the body from which it is escaping. An attempt has been made by the author, although in an idealized case, to establish a sound explanation of the origin of planetary nebulae as the products of escape of gas from red giants and supergiants. According to I. S. Shklovsky, the outer envelope of a giant is separated from the dense hot nucleus in the form of a planetary nebula. Escape of gas from a red supergiant has also been discovered. In this study, the author does not consider the source of the energy leading to ejection of gaseous

Card 1/3

ACCESSION NR: AP4043794

masses. The simplest (spherical) pattern of motion is considered and the problem is formulated in the following way. At the time $t < 0$ between two concentric spheres of the radii r_0 and r_1 , there is a gas situated in the field of gravity of a nucleus of mass M in a state of adiabatic equilibrium. A highly rarefied atmosphere is situated outside the sphere of radius r_0 . Pressure increases as a result of energy release in the interval (t_0, r_0) by the time $t = 0$. The author determines the developing movement of gas outside this volume. From the periphery of the sphere there will be an escape of gas into the atmosphere, whose density is far less than the initial density of the escaping gas. A rarefaction wave penetrates into the depths of the sphere. After a certain time the front of the rarefaction wave reaches the nucleus, after which propagation of a new reflected wave begins. An analytical solution of the formulated problem is apparently impossible; however, an approximate solution is obtained. It is assumed that entropy is constant, that is, there is no dissipation of energy. Shock waves are not considered. The point of departure is a series of equations describing the isentropic motion of gas. "In conclusion, the author thanks Professor K. P. Stanyukovich, under whose direction the work was done, and Professor S. B. Pikel'ner for valuable advice." Orig. art. has: 48 formulas.

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ACCESSION NR: AP4043794

ASSOCIATION: Kafedra teoreticheskoy fiziki Moskovskogo universiteta (Department of Theoretical Physics, Moscow University)

SUBMITTED: 26Dec62

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SUB CODE: AA

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OTHER: 000

Card 3/3

PODGURSKIY, G.V.; PODOSENOVA, N.A.; ROSLAVLEV, V.G.; MIRINA, L.G.; GARASHCHENKO, A.P.; LUNEVA, Z.S.; PETROSYAN, L.K.; DEGTYARENKO, N.S.,
kand. tekhn. nauk, red.; LESNICHENKO, I.I., red. izd-va; GORDEYEVA,
L.P., tekhn. red.

[Technological processes for manufacturing taps of high-speed steel]
Tekhnologiya izgotovleniya meshikov iz bystrozvishchey stali.
Pod red. N.S.Degtiarenko. Moskva, Gos. nauchno-tekhn. izd-vo ma-
shinostroit. lit-ry, 1961. 41 p. (MIRA 14:9)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy instrumental'nyy
institut.

(Taps and dies)

(Metalwork)

PODGURSKIY, G.V.; PODOSENOVA, N.A.; ROSLAVLEV, V.G.; MIRINA, L.G.; BUDNIKOV,
N.Ye.; GARASHCHENKO, A.P.; LUNEVA, Z.S.; PETROSYAN, L.K.; GAMOVA, L.S.;
DEPTYARENKO, N.S., kand. tekhn. nauk, red.; LESHCHENKO, I.I., red.
izd-va; CHERNOVA, Z.I., tekhn. red.

[Technological processes in manufacturing metal-cutting tools] Tekh-
nologiiia izgotovleniia reztsov. Moskva, Gos. nauchno-tekhn. izd-vo
mashinostroit. lit-ry, 1961. 79 p. (MIRA 14:10)
(Metal-cutting tools)

PODOSIENOVA, N.A.

Heat phenomena caused by the grinding of tempered steel. Trudy Sem.
po kach.poverkh. no.4:142-157 '59. (MIRA 13:6)
(Grinding and polishing)
(Steel--Metallography)

PODOSENOVA, N.A., kand.tekhn.nauk

Cutting of P18 steel on eccentric presses. Nov.tekh.izg.instr.
no.2:5-12 '61. (MIRA 15:8)

(Cutting machines)

PODOSENOVA, N. A.

PHASE I BOOK EXPLANATION 307/3688

Abademiya nauk SSSR. Institut mashinovedeniya. Komissiya po tekhnologii mashinostroyeniya. Seminar po kachestvu poverkhnosti. Sposobnye poverkhnosti detalей машин, sberalk 4. Tekhnologicheskiy zavod obrabotki. Metrologiya i pribor. Ksplytatatsionnaya syy-stva poverkhnostnoy sloya (Surface Quality of Machine Parts, Col-lection of Articles, No. 4. Processing Factors in Machining. Layer) Moscow, Izd-vo AN SSSR, 1979. 221 p. (Series: Itis Trudy) Errata slip included. 3,200 copies printed.

Sponsoring Agency: Abademiya nauk SSSR. Institut mashinovedeniya. Reep: Ed.: P.Ye. D'yachenko, Professor; Ed. of Publishing House: G.B. Gorobov; Tech. Ed.: T.P. Poloseva.

NOTE: This collection of articles is intended for technical personnel concerned with the quality of surface finishes of machine parts.

COVERAGE: This collection of articles deals with problems of surface roughness and the effect of surface roughness on the wear and strength of machine parts. Among the topics discussed are the development of international standards for surface roughness, the effect of cutting feeds and speeds on surface roughness, the effect of lay direction on the wear of plane friction surfaces, methods and instruments for measuring surface roughness, and the processing of profilograms of finished surfaces. No personalia are mentioned. References follow several of the articles.

Chubasov, S.F. Quality and Wear of Friction Surfaces	41
Dolgolenko, P.Y. Effect of Lay Direction on the Wear of Plane Friction Parts	49
Sheynberg, I.S. Use of the Cutting Process for Increasing the Fatigue Strength of Machine Parts	55
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15175
S/020/63/148/003/032/037
B101/B186

15 8540
24 7800
AUTHORS:

Sazhin, B. I., Podosenova, N. G.

TITLE:

Compensation effect of the electrical conductivity of crystalline polymeric dielectrics

PERIODICAL:

Akademiya nauk SSSR. Doklady, v. 148, no. 3, 1963, 627 - 629.

TEXT:

The effect of crystallization of polyethylene terephthalate, polytrifluoro chloroethylene, and pentaplast (polymer of 3,3-dimethyl chlorohydroxycyclobutane) on the electrical conductivity σ was studied by calculating σ from the residual current. The increased degree of crystallization was achieved by repeated annealing of the polymers at increasing temperatures. The degree of crystallization was determined according to W. H. Cobbs (J. Polymer Sci., 92, 417 (1958)). An increase in density of 0.5 - 5% corresponding to an increase in degree of crystallization by 10-50% was found to reduce σ by a factor of 10 - 1000. The function $U = A + B \log \sigma$ is linear. For the polymers studied, $B = 0.7$ kcal/mole, $A = 21$. The opposite effect of the change of U and σ_0 on the rate of the process, the compensation effect, was thus found for crystalline polymeric dielectrics for

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Compensation effect of the electrical...

S/020/63/148/003/032/037
B101/B186

the first time. For polyethylene terephthalate, the density d^{30} of the initial sample was 1.345, $\sigma = 3 \cdot 10^{-13} \text{ ohm}^{-1} \cdot \text{cm}^{-1}$. After five annealings at increasing temperatures (105 - 200°C), d^{30} was 1.408, $\sigma = 1 \cdot 10^{-16}$. For polytrifluoro chloroethylene, the initial values were $d^{30} = 2.129$, $\sigma = 4 \cdot 10^{-17}$, after four annealings (130 - 170°C) d^{30} was 2.128, $\sigma = 5 \cdot 10^{-20}$. For pentaplast, the initial values were $d^{30} = 1.407$, $\sigma = 1 \cdot 10^{-16}$; after two annealings (150 - 160°C) d^{30} was 1.416, $\sigma = 1 \cdot 10^{-17}$. The σ values hold for 100°C. There are 1 figure and 1 table.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut polimerizatsionnykh plastmass (State Scientific Research Institute of Polymerization Plastics); Eksperimental'nyy zavod Gosudarstvennogo komiteta Soveta Ministrov SSSR po khimii (Pilot Plant of the State Committee for Chemistry of the Council of Ministers USSR)

PRESENTED: August 3, 1962, by V. A. Kargin, Academician
SUBMITTED: July 24, 1962
Card 2/2

ACCESSION NR: AP4009158

S/0190/64/006/001/0137/0143

AUTHORS: Sazhin, B. I.; Podosenova, N. G.

TITLE: Investigation of polymer electrical conductivity. 8. Effect of crystallization

SOURCE: Vy*sokomolekulyarny*ye soyedineniya, v. 6, no. 1, 1964, 137-143

TOPIC TAGS: polymer, crystallization, electric resistivity, equilibrium period

ABSTRACT: The effect of crystallization of polyethylene-terephthalate, polytrifluorochloroethylene (series I and II), and pentaplast polymers on volumetric electric resistivity ρ_v was investigated for $T > T_c$. The specimens were pressed into 1 mm thick disks 50 mm in diameter. Measurement errors in ρ_v did not exceed 15%.

The experimental points were fitted with curves of the form

$$\frac{1}{\rho_v} = Ae^{-U/\pi T}$$

The results showed a 10- to 1000-fold increase in resistivity upon raising the degree of crystallization from 10 to 50%. This increase was found to have a

Card 1/2

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Card 2/2

ACCESSION NR: AP4041743

S/0181/64/006/007/2215/2217

AUTHOR: Sazhin, B. I.; Podosenova, N. G.

TITLE: Study of the effect of crystallization on the electrical conductivity of polymeric dielectrics

SOURCE: Fizika tverdogo tela, v. 6, no. 7, 1964, 2215-2217

TOPIC TAGS: dielectric, dielectric polymer, crystallization, electrical conductivity, polyethylene terephthalate, polychlorotrifluoroethylene, pentaplast, PET, F-3, PT

ABSTRACT: The effect of crystallization on the electrical conductivity of poly(ethylene terephthalate) (PET) polytrifluorochloroethylene (F-3) and pentaplast (the polymer of 3,3-dimethylchlorohydroxycyclobutane, PT) has been studied to determine whether the compensation effect and a rise in volume resistivity occur on crystallization of these polymers in the glassy state. The temperature dependence of volume resistivity (ρ_v) was determined for samples of these polymers with various degrees of crystallization. The plot of the function $\log \rho_v f(1/T)$ was linear, indicating that this function can be de-

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ACCESSION NR: AP4041743

scribed by the Arrhenius equation ρ_v increased by a factor of 10—100 on crystallization in the 20—70C range, i.e., below the glass transition temperature. It can be shown that the dependence of $\log \rho_v$ on the degree of crystallization is linear, the rise in ρ_v with crystallization indicating ionic conductivity. A plot of the dependence of activation energy (U) on \log (preexponential factor) ($\log \delta_0$) showed that this dependence can be described by the equation

$$U = A + B \log \delta_0,$$

where A and B are positive constants, in the ranges 90—150 and 20—70C. Values of B calculated for each of these ranges showed that B is proportional to the average absolute temperature. This work was done at the Leningrad Scientific Research Institute of [Addition] Polymerization Plastics. Orig. art. has: 2 figures and 1 table.

ASSOCIATION: Nauchno-issledovatel'skiy institut polimerizatsionny*kh plastmass, Leningrad (Scientific Research Institute of Polymerization Plastics)

Card 2/3

ACCESSION NR: AP4041743

SUBMITTED: 03Dec63

ATD PRESS: 3055

ENCL: 00

SUB CODE: SS, MT

NO REF SOV: 008

OTHER: 001

3/3
Card

PODOSHEVNIKOV, B.F.

Variation in the dispersed composition of dioctyl phthalate
vapor during coagulation in a sonic field. Prim. ul'traakust.
k issl. veshch. no.15:137-150 '61. (MIRA 16:8)

(Ultrasonic coagulation)
(Phthalic acid--Acoustic properties)

PODOSHEVNIKOV, B. F., Cand Tech Sci -- (diss) "Research into the acoustic coagulation of highly-dispersed aerosol." Moscow, 1960. 15 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Inst of Chemical Machine-building); 220 copies; price not given; (KL, 17-60, 158)

ACCESSION NR: AR4039363

S/0272/64/000/003/0048/0048

SOURCE: Ref. Zh. Metrol. i izmerit. tekhn. Otd. vyp., Abs. 3.32.338

AUTHOR: Podoshevnikov, B. F.

TITLE: On a method of evaluating electrodynamic emitter of sound

CITED SOURCE: Sb. Primemeniye ul'traakust. k issled. veshchestva. Vyp. 17. M., 1963, 67-73

TOPIC TAGS: acoustic source, aerosol, coagulation

TRANSLATION: Presented is a method for evaluation of electrodynamic emitter, which is employed in a generating apparatus for acoustic coagulation of highly dispersive aerosols. The calculation involves a sound reel, strength of resonator feeding the acoustic reel, a magnetic system, and a vibrating spindle of the electrodynamic emitter.

DATE ACQ: 22Apr64

SUB CODE: GPEC

ENCL: 00

Card: 1/1

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SOV/64-59-6-18/28

5(1)

AUTHORS: Podoshevnikov, B. F., Tartakovskiy, B. D.

TITLE: On the Method of Calculating Columns for the Coagulation of Aerosols With a Liquid Disperse Phase Due to the Action of Sound

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 6, pp 527 - 528 (USSR)

ABSTRACT: Experiments (Ref 1) showed that in a sound field of high intensity a considerable muffling of sound waves can be observed which exhibits a linear dependence upon the intensity of the sound pressure. Since the muffling of sound waves in the columns has so far not been taken into consideration in the calculations concerning agglomeration columns, an essential change must be made in these calculations. The equations for calculating an agglomeration column possessing in its upper part a sound producer, e.g. a siren, are derived, and the following final equation is obtained:

$$P_0 = \frac{\alpha_0 [e^{(PT)kV} - 1]}{k (1 - e^{-\alpha_0 H})} \quad (8) \quad (\alpha_0 = \text{muffling coefficient of}$$

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of sound waves with an infinitely small amplitude, P = sound

PODOSHEVNIKOV B. F.

SOV/46-4-4-15/20

AUTHORS: Podoshevnikov, B.F. and Tertakovskiy, B.D.

TITLE: Attenuation of Plane Acoustic Waves of Finite Amplitude in Gases
(O zatakhanii ploskikh zvukovykh voln konechnoy amplitudy v gazakh.)

PERIODICAL: Akusticheskiy Zhurnal, 1958, Vol. 4, No. 4, pp 369-371 (USSR)

ABSTRACT: Attenuation of plane acoustic waves of finite amplitude in viscous heat-conducting media was dealt with theoretically in Refs 1, 2. Experimental measurements in gases, made at 140 kc/s, were reported in Ref 3. The present authors studied dependence of the attenuation of 13 kc/s acoustic waves in gases on their intensity. An electrodynamic resonance generator of the type described in Ref 4 was attached to a cylindrical tube of 105 cm length and 12.4 cm diameter (the generator diameter was 12 cm). A sinusoidal voltage was applied to the generator from a 3 kW source. The radiating element was a solid aluminium cylinder with 13 kc/s resonance frequency. The radiated wave was not fully planar. The variation of sound pressure p_1 along the tube axis was measured by means of a barium titanate probe. Fig 1 shows

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SOV/46-i-4-15/20

Attenuation of Plane Acoustic Waves of Finite Amplitude in Gases

the sound pressure p_1 as a function of the distance along the tube r . Circles denote experimental results plotted directly, while crosses represent statistically averaged out results. Fig 2 shows dependence of the attenuation coefficient α_1 as a function of p_1 , where p_1 is the mean value of p at $r = 75$ cm. Fig 2 shows that α_1 is a linear function of p_1 . This linear dependence can be used in the choice of acoustic parameters in apparatus used for coagulation of aerosols. There are 2 figures and 6 references, 2 of which are Soviet and 4 American.

ASSOCIATION: Gosudarstvennyy n.-i. institut po promyshlennoy i sanitarnoy ochistke gazov, Moskva (State Research Institute for Industrial and Sanitary Purification of Gases, Moscow)

SUBMITTED: May 15, 1968

Card 2/2

PODOSHEVNIKOV, B.F.; TARTAKOVSKIY, B.D.

Absorption of sound of finite amplitude in a coagulating aerosol.
Zhur.prikl.khim. 34 no.11:2573-2574 N '61. (MIRA 15:1)
(Aerosols) (Absorption of sound)

PODOSHEVNIKOV, B.F.

Acoustic coagulation of aerosols in dependence on the sound duration
value. Zhur. prikl. khim. 34 no. 12:2664-2668 D '61. (MIRA 15:1)
(Aerosols) (Sound waves)

AUTHORS: Gudemchuk, V.A., Podoshevnikov, V.F. and Tartakovskiy, B.D. SOV/46-5-2-22/34

TITLE: On the Role of Turbulence in the Phenomenon of Acoustic Coagulation of Aerosols (K voprosu o roli turbulentnosti v yavlenii akusticheskoy koagulyatsii aerorozoley)

PERIODICAL: Akusticheskiy zhurnal, 1959, Vol 5, Nr 2, p 246 (USSR)

ABSTRACT: The physical nature of the process of acoustic coagulation of aerosols is still not clear. In particular the role of turbulence has not yet been elucidated, although Matula has suggested that it may be important. The authors studied the effect of turbulence on coagulation of dioctylphthalate, using 13 kc/s acoustic waves. The aerosol was passed from below through a vertical cylindrical column of 125 cm height and 12.4 cm diameter. The mean radius of the aerosol particles was 0.28 μ . The coagulation effect was judged from the ratio of intensities of light scattered by the aerosol before and after coagulation. Turbulence was found to increase on increase of the sound pressure produced by the acoustic generator (placed at the top of the column). Eddies were

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SOV/46-5-2-22/34
On the Role of Turbulence in the Phenomenon of Acoustic Coagulation
of Aerosols

seen to form at the point where the aerosol entered the column. In order to limit the motion of eddies in the horizontal direction the authors placed a grid consisting of plates 90 cm long and 1-2 cm apart. When this grid was placed in the column coagulation fell by a factor of 1.8. In other words turbulence plays an important role in coagulation of aerosols by means of sound. The effect of turbulence probably lies in mixing of the aerosol particles by the eddies. There is 1 figure, and 1 reference (translation).

ASSOCIATION: Gosudarstvennyy n.-i. institut po promyshlennoy i sanitarnoy ochistke gazov (State Scientific-Research Institute for Industrial and Sanitary Purification of Gases)

SUBMITTED: September 19, 1958

Card 2/2

PODOSHKIN, N.V.

Effect of the speed of cutting on the quality of the surface
during the grinding of steel. Uch. zap. Mord. gos. un. no.15
pt.2:71-80 '63.
(MIRA 18:6)

PODOSHVA, B., instruktor-planerist

Piloting the A-13 glider. Kryl.rod 13 no.8:18 Ag '62.

(MIRA 15:8)

1. Moskovskiy planernyy klub.
(Gliders (Aeronautics))

BOCHKAREV, V.V., red.; PODOSHVINA, V.A., red.; ALYAB'YEV, A.F.,
red.; VLASOVA, N.A., tekhn.red.

[Production and application of radioisotopes; selected papers
by foreign scientists] Poluchenie i primeneniye radioaktivnykh
izotopov; izbrannyye doklady inostrannykh uchennykh. Pod red.
V.V.Bochkareva. Moskva, Gossatomizdat, 1962. 287 p.

(MIRA 15:11)

1. Mezhdunarodnaya konferentsiya po primeneniyu radioizotopov
v fizicheskikh naukakh i promyshlennosti, Copnhagen, 1960.
(Radioisotopes)

GALKIN, N.P.; PONOMAREV, L.A.; SHISHKOV, Yu.D.; PODOSHVINA, V.A., red.;
VLASOVA, N.A., tekhn. red.

[Plutonium hexafluoride, its preparation and properties] Geksaf-
torid plutonia, ego poluchenie i svoistva. Moskva, Gos.izd-vo
lit-ry v oblasti atomnoi nauki i tekhniki, 1961. 34 p.

(MIRA 15:2)

(Plutonium fluoride)

RUJENKO, Nikolay Pavlovich; KALINKINA, Olga Mikhaylovna;
PODOSHVINA, L.A., red.

[radioactive isotopes of zirconium and niobium
Zr⁹⁵ - Nb⁹⁵ and Zr⁹⁷ - Nb⁹⁷] Radioaktivnye izotopy
tsirkonia i niobia Zr⁹⁵ - Nb⁹⁵ i Zr⁹⁷ - Nb⁹⁷. Moskva,
Atomizdat, 1964. 24 p. (MIRA 17:10)

GORLOVOY, Gennadiy Dmitriyevich; STEPANENKO, Vladimir Anan'yevich;
PODOSHVINA, V.A., red.

[Tritium emitters] Tritievye izluchateli. Moskva, Atom-
izdat, 1965. 115 p. (MIRA 18:12)

KORYAKIN, Yu.I., nauchn. red.; POLOSHVINA, V.A., red.

[Tenth anniversary of the world's first atomic power plant
built in the U.S.S.R.] 10 let pervoi v mire atomnoi elektro-
stantsii SSSR. Moskva, Atomizdat, 1964. 213 p.

(MIRA 17:10)

MOZZHUKHIN, Aleksandr Sergeyeovich; RACHINSKIY, Foma Yur'yevich;
PODOSHVINA, V.A., red.

[Chemical prevention of radiation lesions] Khimicheskaya
profilaktika radiatsionnykh porazhenii. Moskva, Gosatom-
izdat, 1964. 243 p.
(MIRA 17:6)

REFORMATSKIY, Igor' Aleksandrovich; PODOSHVINA, V.A., red.

[Laboratories for work involving radioactive substances]
Laboratorii dlia rabot s radioaktivnymi veshchestvami. Mo-
skva, Gosatomizdat, 1963. 127 p. (MIRA 17:4)

BRODER, D.L., red.; VESELKIN, A.P., red.; YEGOROV, Yu.A., red.;
ORLOV, V.V., red.; TSYPIN, S.G., red.; PODOSEVINA, V.A.,
red.; NIKITINA, T.K., red.; VLASOVA, N.A., tekhn. red.

[Problems in the physics of reactor shielding] Voprosy fiziki
zashchity reaktorov; sbornik statei. Moskva, Gosatomizdat,
1963. 345 p. (MIRA 16:12)
(Nuclear reactors--Shielding (Radiation))

PANFILOVA, Z.Ye.; ROKHLIN, M.I.; RODIONOV, I.S.; FAUSTOVA, D.G.;
GOL'DSHTEYN, D.S.; GORODINSKIY, S.M., red.; TIKHOMIROV,
V.B., red.; PODOSHVINA, V.A., red.; VLASOVA, N.A., tekhn.
red.

[Protective coatings in atomic engineering] Zashchitnye po-
krytiia v atomnoi tekhnike; sbornik statei. Moskva, Gos-
atomizdat, 1963. 183 p. (MIRA 16:12)
(Shielding (Radiation))

SHCHELKIN, Kirill Ivanovich; PODOSHVINA, V.A., red.; ROPOVA,
S.M., tekhn. red.

[Physics of the microcosm; popular essays] Fizika mikromira;
populiarnye ocherki. Moskva, Gosatomizdat, 1963. 166 p.
(MIRA 16:5)

1. Chlen-korrespondent Akademii nauk SSSR (for Shchelkin).
(Nuclear physics)

DUBININ, Nikolay Petrovich; PODOSHVINA, V.A., red.; VLASOVA, N.A.,
tekhn. red.

[Molecular genetics and the effect of irradiation on heredity]
Molekuliarnaia genetika i deistvie ~~izlucheni~~ na nasledstven-
nost'. Moskva, Gosatomizdat, 1963. 238 p. (MIRA 16:5)
(GENETICS) (RADIATION—PHYSIOLOGICAL EFFECT)

PODOSHVINA, V.A., red.; MAZEL', Ye.I., tekhn. red.

[Industrially manufactured electrophysical apparatus]
Elektrofizicheskaia apparatura promyshlenno izgotovleniia;
spravochnik. Moskva, Gosatomizdat, 1963. 69 p.
(MIRA 17:1)
(Particle accelerators) (Electromagnets)

PARNOV, Ye.I.; GLUSHCHENKO, Ye.A.; PODOSHVINA, V.A., red.;
POPOVA, S.M., tekhn. red.

[Window on the antiuniverse] Okno v antimir. Izd.2. Moskva, Gosatomizdat, 1963. 74 p. (MIRA 17:2)

TRIFONOV, Dmitriy Nikolayevich; PODOSHVINA, V.A., red.; POPOVA,
S.M., tekhn. red.

[Boundaries and evolution of the periodic system]
Granitsy i evoliutsiia periodicheskoi sistemy. Moskva,
Gosatomizdat, 1963. 165 p. (MIRA 17:1)

LAVRUKHINA, Avgusta Konstinovna; KOLESOV, Gennadiy Mikhaylovich;
PODOSHVINA, V.A., red.; MAZEL', Ye.I., tekhn. red.

[Formation of chemical elements in cosmic bodies]Obrazovanie
khimicheskikh elementov v kosmicheskikh telakh. Moskva, Gos-
atomizdat, 1962. 171 p. (MIRA 15:12)
(Chemical elements) (Cosmogony)

BUDYLIN, B.V.; VOROB'YEV, A.A.; PODOSHVINA, V.A., red.; VLASOVA,
N.A., tekhn. red.

[Effect of radiation on ionic structures] Deistvie izluche-
nii na ionnye struktury. Moskva, Gosatomizdat, 1962. 166 p.

(Dielectrics, Effect of radiation on)
(Ionic crystals)

(MIRA 15:9)

GLAZOV, Nikolay Vasil'yevich [deceased]; PODOSHVINA, V.A., red.;
VLASOVA, N.A., tekhn. red.

[Using radioisotopes in engineering studies] Primenenie radio-
aktivnykh izotopov v inzhenernykh izyskaniakh. Moskva, Gos.
izd-vo lit-ry v oblasti atomnoi nauki i tekhn., 1962. 67 p.
(MIRA 15:3)

(Radioisotopes—Industrial applications)
(Engineering geology)

FRADKIN, Grigoriy Mikhaylovich; PODOSHVINA, V.A., red.; VLASOVA,
N.A., tekhn. red.

[Isotopic neutron sources] Izotopnye istochniki neitronov;
spravochnik. Moskva, Gosatomizdat, 1963. 86 p.

(MIRA 16:12)

(Isotopes) (Neutron sources)

GOL'DIN, L.L.; SKACHKOV, S.V.; SHORIN, K.N.; PODOSHVINA, V.A., red.;
VLASOVA, N.A., tekhn. red.

[Magnetic measurements in charged particle accelerators] Mag-
nitnye izmereniia v uskoriteliakh zariazhennykh chastits. Mo-
skva, Gosatomizdat, 1962. 55 p. (15:4)
(Particle accelerators) (Magnetic measurements)

AMIRAGOVA, M.I.; DUZHENKOVA, N.A.; SAVICH, A.V.; SHAL'NOV, M.I.;
PODOSHVINA, V.A., red.

[Primary radiobiological processes] Pervichnye radio-
biologicheskie protsessy. [By] M.I.Amiragova i dr.
Moskva, Atomizdat, 1964. 286 p. (MIRA 17:12)

RUDANOVSKIY, Aleksandr Aleksandrovich; PODOSHVINA, V.A., red.

[Radioactive isotopes in mining and mineral dressing]
Radioaktivnye izotopy v gornom dele i obogashchenii
poleznykh iskopaemykh. Moskva, Atomizdat, 1965. 179 p.
(MIRA 18:12)

SHCHELKIN, Kirill Ivanovich; PODOSHVINA, V.A., red.

[Physics of the microcosm popularized] Fizika mikromira;
populiarnye ocherki. Moskva, Atomizdat, 1965. 230 p.
(MIRA 18:10)

1. Chlen-korrespondent AN SSSR (for Shchelkin).

KUKURECHENKO, I.S.; SUKHACHEV, N.G.; SHOKIN, I.N.; KRASHENINNIKOV, S.A.;
PODOSINKIN, P.A.; POSTORONKO, A.I.; TROYNIK, G.G.

Decarbonization of sodium bicarbonate in a semi-industrial
column with submerged packing. Trudy MKHTI no.40:186-190
'63. (MIRA 18:12)

BOLDIN, K.M. (Yaroslavl'); DROZDOVA, Z.S.; LEVIN, R.I.; VAYSMAN, L.A. (Kuybyshev-obl.); PODOSINOVSKIY, V.V. (Kazan'); SAYFULLINA, Kh.M. (Kazan'); EUSYGIN, N.V. (Kazan'); RAZUMOVSKIY, Yu.K. (Leninogorsk); GEL'FER, G.A., dotsent (Gor'kiy); MAMISH, M.G. (Kazan'); RAFALOVICH, M.B., dotsent; MEL'NICHUK, S.P., kand.med'nauk; KRPIVIN, B.V.; STAROVEROV, A.T. (Saratov); SURIN, V.M.; POROSENKOV, V.S. (Romodanovo, Mordovskoy ASSR); ANDROSOV, M.D. (Moskva); ZARIPOV, Z.A. (Urussu, Tatarskoy ASSR); MURAV'YEV, M.F. (Izhevsk); KUZ'MIN, V.I. (Batyrevo, Chuvashskoy ASSR); SITDYKOV, E.N. (Kazan'); YUDIN, Ya.B. (Novokuznetsk)

Short reports. Kaz.med.zhur. no.4:81-91 J1-Ag '62. (MIRA 15:8)
(MEDICINE--ABSTRACTS)

PODPEROVA, A

Distr: 4E3d/4E2c(j)

Wald rearrangement of 1-diazo-3-bromo- α -phthalimidoalkanes. J. Michalický, M. Holík, and A. Podperová (Masaryk Univ., Brno, Czech.). *Monatsh. Chem.* 90, 814-21 (1959); cf. *CA* 53, 21876c.—The title compds. were rearranged by Ag₂O in MeOH to the corresponding α,β -unsatd. Me α -phthalimidoalkenecarboxylates, which added CH₂N₂ to give 2-pyrazolines. Me 4-phthalimidocrotonate (I) (100 mg.), dil. H₂SO₄, and 5 ml. AcOH were heated 1 hr. at 100°; the soln. was then concd. to small vol. *in vacuo* to give 100% 4-phthalimidocrotonic acid (II), m. 194-6° (AcOH). I (400 mg.) was added to an excess of CH₂N₂ in Et₂O and the mixt. kept 20 hrs. to give 385 mg. Me 4-phthalimidomethyl 2-pyrazoline-5-carboxylate (III), m. 164-6° (with evolution of N) (MeOH). I (8 g.), 50 ml. 37% aq. HCl, and 50 ml. AcOH were heated 2 hrs. at 100°; the mixt. was then evapd. to dryness and the residue recrystd. from H₂O to give crude II which was then added during 10 min. to CH₂N₂ in Et₂O. After 30 min. the soln. was filtered and then kept 24 hrs. to give a ppt. of 3 g. III; concn. of the Et₂O mother liquors gave 3.9 g. Me 3-chloro-4-phthalimidobutyrate (IV), m. 94-8° (MeOH). IV (500 mg.) was hydrolyzed with 1:1 37% HCl-AcOH for 1.5 hrs.; evapn. of the mixt. to dryness and recrystn. of the residue from H₂O gave 3-chloro-4-phthalimidobutyric acid, m. 169-70°, which with CH₂N₂, as before gave IV. IV (200 mg.) in 50 ml. MeOH was heated 6 hrs. at 100° with excess freshly pptd. Ag₂O; the mixt. was then decolorized with C, filtered, concd. to 2 ml., and cooled to give I. 2-Bromo-4-phthalimidobutyric acid (4.5 g.) and 50 ml. SOCl₂ were refluxed 2 hrs.; the excess SOCl₂ was then removed *in vacuo* and the residue was taken up in C₆H₆, added dropwise to CH₂N₂ in Et₂O at -15°, and the mixt. kept 12 hrs. at -10° to give 2.5 g. 1-diazo-3-bromo-5-phthalimidopentan-2-one (V), yellow needles; m. 120° (MeOH). Aq. HBr (40%) was added to 500 mg. V in 10 ml. AcOH until the evolution of N

ceased; after 30 min. the mixt. was diltd. with 100 ml. H₂O to give 450 mg. 1,3-dibromo-5-phthalimidopentan-3-one, m. 96-7° (MeOH); 200 mg. V with 37% aq. HCl similarly gave 180 mg. 1-chloro-3-bromo-5-phthalimidopentan-2-one, needles, m. 95.5° (MeOH). Freshly pptd. Ag₂O (from 8 g. AgNO₃) suspended in MeOH was added to 8 g. V in 150 ml. freshly distd. MeOH; after the initial violent reaction ceased the mixt. was refluxed 10 hrs., decolorized with C, filtered, concd. and cooled to give 4.8 g. Me 5-phthalimidopent-2-enoate (VI), m. 93-4° (MeOH). VI (100 mg.) in 10 ml. EtOH was reduced with H over 50 mg. 5% Pd-BaSO₄ at room temp. and 1 atm.; the mixt. was then filtered and evapd. to dryness and the residue recrystd. from a little MeOH to give Me 5-phthalimidovalerate (VII), m. 42-3°. Ag₂O (from 4 g. AgNO₃) was added to 10 g. 1-diazo-5-phthalimidopentan-2-one in 150 ml. MeOH and the mixt. heated 5 hrs. at 80° and then worked up as before to give 9 g. VII. VI (2.8 g.) and 1:1 37% aq. HCl were heated 1 hr. at 100°; the mixt. was then evapd. to dryness and the residue recrystd. from H₂O to give 2.5 g. 5-phthalimidopent-2-enoic acid (VIII), m. 202-3° (in a sealed tube). VIII (200 mg.) and excess CH₂N₂ in Et₂O were kept 12 hrs. at room temp.; the mixt. was then filtered and concd. to give 190 mg. Me 4-(2-phthalimidoethyl)-2-pyrazoline-5-carboxylate, m. 118-21° (with evolution of N) (MeOH). The following homologs of these compds. were similarly prepd. (compd., % yield, m.p., recrystn. medium given): 1-diazo-3-bromo-6-phthalimidohexan-2-one, 82.4, 103-4°, MeOH; 1,3-dibromo-6-phthalimidohexan-2-one, 93.4, 99-102°, MeOH; 1-chloro-3-bromo-6-phthalimidohexan-2-one, 68.3, 111-12°, MeOH; Me 6-phthalimido-2-hexenoate, 55.1, 85-8°, MeOH; Me 6-phthalimidovalerate, —, 45-6°, MeOH; 6-phthalimido-2-hexenoic acid, 88, 163-5°, H₂O.

M. L. Burstall

82569

S/123/60/000/009/005/017
A004/A001

18.5200

Translation from: Referativny zhurnal. Mashinostroyeniye, 1960, No. 9, p. 62,
43522

AUTHOR: Podporokin, V.G.

TITLE: Increasing the Accuracy and Efficiency of the Machining of Non-
Rigid Shafts 14

PERIODICAL: Nauchno-tekhn. inform. byul. Leningr. politekhn. in-t, 1958, No. 6,
pp. 3-21

TEXT: The author analyzes the methods of increasing the accuracy and efficiency of the machining of non-rigid shafts on lathes. When determining the machining errors, caused by elastic deformations of the system lathe - machine part - tool, the conception of rigidity was replaced by the conception of yielding which is measured in μ /kg. The author presents graphs of the yielding of the system during the machining of shafts of 50 and 100 mm in diameter. The vibration stability of the system grows if yielding decreases. In order to increase the cylindrical accuracy at minimum longitudinal errors it

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A004/A001

Increasing the Accuracy and Efficiency of the Machining of Non-Rigid Shafts

is recommended to use the method of preconceived variation of the initial state of the system or the method of compensating the yielding. It was found that a higher machining accuracy can be obtained by shifting the position of the tail stock. A compensation of yielding of the tail stock is achieved by changing the tail spindle sweep and using a set of 2-3 centers of different rigidity. Formulae for the calculation of yielding are presented. Positive results were obtained when carrying out tests to compensate the yielding of the system during the turning of shafts of particular low rigidity by using a vibration absorber instead of a rest. The rigidity of the shaft itself and the right selection of the lathe exercise a great effect on the achievement of high accuracy. It is shown that the existing classification of shafts with the rigidity coefficient $k = \frac{1}{d}$ ($k = 3-5$ for rigid shafts and $k = 10-12$ for non-rigid shafts) is defective. It is suggested to determine the rigidity of shafts starting from the condition of the least irregularity of yielding of the system and the machining method. The author derives formulae and presents a nomogram of classifying shafts into three groups (rigid shafts, shafts of medium rigidity and non-rigid ones) in order to select the right types of equipment and obtain a minimum of errors

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A004/A001

Increasing the Accuracy and Efficiency of the Machining of Non-Rigid Shafts

of elastic deformations in the system. The problem of compensating the yielding of the system during the machining of stepped shafts is also investigated. There are 9 figures and 7 references. ✓

B.I.M.

Translator's note: This is the full translation of the original Russian abstract.

Card 3/3

KALININ, M.A., uchitel'; KRASIKOV, I.N., uchitel'; PETROV, P.F.,
zasluzhenny uchitel' shkoly RSFSR; PODOINKIN, B.H., uchitel';
KALUZHSKIKH, N.I., uchitel'; YEGYAZARYAN, D.; OKHAPKIN, F.P.
(Kirov); GUTENEV, P.A. (s.Mikhaylovskoye Stavropol'skogo kraya)

Editor's mail. Geog. v shkole 25 no.1:58-61 Ja-F '62. (MIRA 14:1)

1. 1-ya shkola g. Boksitogorska (for Kalinin). 2. Sydinskaya
semiletnyaya shkola Krasnoyarskogo kraya (for Krasikov). 3.
Shkola imeni M.I. Kalinina, g. Buguruslan (for Petrov). 4. 5-ya
shkola g. Ishimpaya (for Podosinkin). 5. Nizhne-Smorodinskaya
shkola Kurskoy oblasti (for Kaluzhskikh). 6. Aygestanskaya
shkola Armyanskoy SSR (for Yegyazaryan).

(Geography--Study and teaching)

PODOL'SKAYA, I.A., uchitel'nitsa geografii; PROKA, V.Ye. (Kishinev);
PODOSINKIN, V.N.; MIRKHAZOV, G.G., uchitel' geografii

Editor's mail. Geog. v shkole 25 no.4:63-65 JI-Ag '62. (MIRA 15:8)

1. 1-ya shkola imeni Pushkina, g.Berezniki (for Podol'skaya).
2. 5-ya shkola g. Ishimbay (for Podosinkin). 3. Burayevskaya odinnadtsatiletnyaya shkola Bashkirskoy ASSR (for Mirkhazov).
(Geography--Study and teaching) (School excursions)

BLOKH, G.A., kand.tekhn.nauk, dotsent; PODOSINNIKOV, N.N., inzh.;
CHERENYUK, I.P., inzh.

Investigating the action mechanism of zinc-containing accelerators
of rubber vulcanization. Izv.vys.ucheb.zav.; tekhn.prom.
no.3:50-66 '60. (MIRA 13:8)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut.
Rekomendovana kafedrami tekhnologii reziny i fiziki.
(Vulcanization)

PODOSOV, L.A., VERESHCHAGIN, N.A.

"On enriching the ration of alkaline equivalents."

Report submitted for the 13th Intl. Congress of Sports Medicine
Moscow July-Aug 1961

PODRABINEK, P. A., Cand Med Sci -- (diss) "Problem of the mechanism of the settling reaction of erythrocytes." Moscow, 1960. 17 pp; (Moscow Order of Lenin Medical Inst im I. M. Sechenov); number of copies not given; price not given; list of author's works on p 17 (12 entries); (KL, 25-60, 140)

PODISHIBYAKIN, A. K.

med

✓ 178). Changes in the topography of the electrical potentials of the skin in some psychiatric illnesses. A. K. Podshibjakin and V. M. Vashchko *Psichol. Zh.*, S.S.S.R., 1955, 1, 18-26; *Referat. Zh. Biol.*, 1958, Abstr. No. 51319. -- In schizophrenics (39 cases) there was a disturbance of the symmetry of the size of the electrical potential in the fronto-parietal and in the parietal active points of the skin of the head, and there were also "accents" (sharp rise in potential) in the active points of the skin of the trunk, corresponding to the liver and spleen. In Pick's disease (4) there was disturbance of the symmetry, and "accents" in the active points of the frontal region. In sclerosis of the brain (14), there was a change in the distribution of electrical potential most marked in the fronto-parietal and occipital regions. (Ukrainian)

D. H. SUTIN

2

PODSEBYAKIN, A.K.

Determining the location of a pathological process in the lungs on the basis of a change in active skin spots; a preliminary report.
Medych.zhur. 22 no.3:22-25 '52. (MIRA 11:2)

1. Institut klinichnoi fiziologii im. akad. O.O.Bogomol'taya.
(LUNGS--DISEASES) (SKIN--INNERVATION)

PODSHIBYAKIN, A.K. [Podshytiakin, A.K.]

Activity in the skin of the frog [with summary in English].
Fiziol.zhur. [Ukr] 4 no.4:478-484 J1-Ag '58 (MIRA 11:10)

1. Institut fiziologii im. A.A. Bogomol'tsa AN USSR, laboratoriya
vyshey nervnoy deyatel'nosti i nervnoy trofiki.
(SKIN--INNERVATION)

PODSHIBYAKIN A. K

USSR / Human and Animal Physiology (Normal and Pathological). Nervous System. General Problems. T

Abs Jour: Ref Zhur-Biologiya, No 21, 1958 97837

Author : Podshibyakin, A. K.

Inst : Not given

Title : The Peculiarities of Blocking Action of Novocaine

Orig Pub: Fiziol. zh. AN URSR, 1956, 2, No 5, 75-81

Abstract: Slow oscillations of potentials were measured with a galvanometer (1.6×10^{-9} amps) with oscillation period of 5 seconds in 21 rabbits. One electrode was placed on a portion of skin well saturated with physiological solution; the other (nonpolarized), on the frontal region of the brain (nearer to the parietal region). A 0.25 percent solution

Card 1/2

BLOKH, G.A.; GRISHKO, G.S.; PODOSINNIKOV, N.N.

High-temperature treatment of carbon black to be used as a rubber reinforcing filler. *Izv.vys.uчеб.zav.; khim.i khim.tekh.* 2
no.1:114-122 '59. (MIRA 12:7)

1. Dnepropetrovskiy khimiko-tekhnologicheskii institut, kafedra
tekhnologii reziny i kafedra fiziki.
(Rubber) (Carbon black)

GORGIIYEV, T.B.; TRIKOZ, V.S.; PODOSIENNIKOVA, M.P.; TIKHAYA, R.I.

Preparing culture media from fishery wastes; author's abstract. Zhur.
mikrobiol., epid. i immun. 30 no. 11: 114-115 N '59. (MIRA 13:3)

1. Iz Dnepropetrovskogo instituta epidemiologii, mikrobiologii i
gigiyeny.

(BACTERIOLOGY--CULTURES AND CULTURE MEDIA)
(FISH PROCESSING PLANTS--BY-PRODUCTS)

5(1,3)

AUTHORS:

Blokh, G. A., Grishko, G. S., Podosinnikov, N. N. SOV/153-2-1-21/25

TITLE:

On the High-temperature Treatment of Carbon Black for Rubber Strengthening (Vysokotemperaturnaya obrabotka sazhi-usilitelya kauchuka)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1959, Vol 2, Nr 1, pp 114-122 (USSR)

ABSTRACT:

Though the effect of the afore-mentioned carbon black is generally known, its strengthening effect has not yet been fully explained. Recent investigations have demonstrated that some kinds of carbon black cannot be regarded as chemically passive ingredients any longer which do not enter reaction with rubber (Refs 6-8). The structure of carbon black contains such oxygen-containing groups as $-\text{OH}$, $-\text{COOH}$, $=\text{C}=\text{O}$, $\text{HO}-\overset{\text{i}}{\text{C}}=\text{O}$, etc. The presence of $\text{C}=\text{C}$ bonds is mentioned. The authors then refer to further publications (Refs 9-19). It was interesting from the practical and theoretical point of view to explain the influence exerted by the active oxygen-containing groups of the black structure upon its strengthening property in mixtures of syn-

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On the High-temperature Treatment of Carbon Black for Rubber Strengthening

thetic rubbers. In this connection it was of special importance to explain the effect exercised by the removal of oxygen and hydrogen upon the strengthening properties. As is known, neither oxygen nor hydrogen can be completely separated from the black structure by temperature rise of up to 1000-1700°C. Table 1 shows the composition of the gas mixtures, the conditions of vulcanization, and experimental results. Electron-microscopic images (Fig 1) indicated variations in black chain-systems due to the effect of high temperatures. In general it was found that the elementary composition of black (Table 2) is changed by heating to high temperatures. Thus, also the specific surface (Table 3) and the adsorptive activity (Table 4) are reduced with respect to rubber. The authors investigated rubber kinds of divinyl-styrene- and chloroprene rubber. Figure 2 shows the X-ray pictures of black after the treatment at 900, 1400, and 1700°C which indicate that the spatial arrangement is improved with increasing temperature. Table 5 shows the structural change of black treated at high temperatures. The physico-mechanical indices of rubber produced from divinyl-styrene rubber with gas black heated up to 1700°C were considerably reduced. The number

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On the High-temperature Treatment of Carbon Black for Rubber Strengthening

SOV/153-2-1-21/25

of active centers of the chemical interaction of black with rubber decreases, and the specific surface and the adsorptive activity of the black structure with respect to rubber are reduced. K. A. Pechkovskaya and I. N. Duzhanskiy, Tséntral'naya laboratoriya ob"yedineniya "Ukrgas" g. L'vov (Central Laboratory of the Union "Ukrgas" (Ukrainian Gas), L'vov) assisted in the present investigation. There are 3 figures, 5 tables, and 24 references, 15 of which are Soviet.

ASSOCIATION: Dnepropetrovskiy khimiko-tehnologicheskii institut; Kafedra tekhnologii reziny i kafedra fiziki (Dnepropetrovsk Institute of Chemical Technology, Chair of Rubber Technology and Chair of Physics)

SUBMITTED: October 15, 1957

Card 3/3

PODOSINNIKOV, V.

Separation of lubricants aboard ship. Rech. transp. 22 no.9:
30-31 S '63. (MIRA 16:10)

1. Starshiy mekhanik teplokhoda "K.A. Timiryazev" Volzhskogo
ob'yedinennogo rechnogo parokhodstva.

PODOSINOV, N.G.

I support the suggestions of M.I.Mel'nikov. Biol. v shkole no.4:
45-46 J1-Ag '63. (MIRA 16:9)

1. Shkola No.36, Tula.

(Biology--Study and teaching)

PODOSKI, E.

"Grassland competitions."

p. 544 (Gospodarka Wodna) Vol. 17, no. 11, Nov. 1957
Warsaw, Poland

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

PODOLSKI, J.

Vagrant currents in the communal installations. p.129.
GOSPODARSTWA WODNA (Naczelna Organizacja Techniczna) Warszawa
Vol. 16, no. 3, Mar. 1956

So. East European Accessions List Vol. 5, No. 9 September 1956

POLOSKI, J.

Electric traction equipment. p. 10.

PRZEGLAD TECHNICZNY. (Naczelna Organizacja Techniczna) Warszawa, Poland.
Vol. 80, no. 19, May 1959.

Monthly List of East European Accessions (MEAI) LC. Vol. 8, no. 7, July 1959.

Uncl.

PODOSKI, Jan, prof.; RAJSKI, Czestlaw, prof.

Forty years of the Electric Engineering Department of the Warsaw
Politechnical College. Przegl elektroniki 2 no.3:241-242 J1 '61.

1. Dziekan Wydzialu Elektrycznego, Politechnika, Warszawa (for
Podoski). 2. Dziekan Wydzialu Iacznosci, Politechnika, Warszawa
(for Rajski).

RAJSKI, Czeslaw, prof., dr.; PODOSKI, Jan, prof., dr.

Fortieth anniversary of the Electric Department, Warsaw Polytechnic;
November 8, 1961. Przegl elektrotechn 37 no.9:388 '61.

1. Dziekan Wydzialu Laczności Politechniki Warszawskiej (for Rajski)
2. Dziekan Wydzialu Elektrycznego Politechniki Warszawskiej (for Podoski)

(Poland---Technical education)

PODOSKI, Jan, prof.; RAJSKI, Czeslaw, prof.

Forty years of the Electric Engineering Department of the Warsaw Polytechnic. Przegł telekom 34 no.9:261 S '61.

1. Dziekan Wydziału Elektrycznego, Politechnika, Warszawa (for Podoski).
2. Dziekan Wydziału Łączności, Politechnika, Warszawa (for Rajski).

PODOSKI, Julian

Organization of the sale of technical books in Lodz. Przegł techn
no.40:5,6 7 0 '62.

PODOSKI, Julian

Causes of the low elasticity of the production for export in the
textile industry. Przegl techn no.36:4 9 S '62.

PODOSKI, Julian.

Polish-made flaxboard plates proved as good.
Przeł techn no.29:6. J1 '62.

FUJIKI, n.

DECEASED

see ILC

I 31552-66 EWT(m)/EWP(j) RM

ACC NR: AP6005109

SOURCE CODE: UR/0316/65/000/005/0044/0047

AUTHOR: Aliyev, M. I.; Shikhiyev, I. A.; Balezin, S. A.; Israfilova, S. Z.; Podoyayev, N. I.

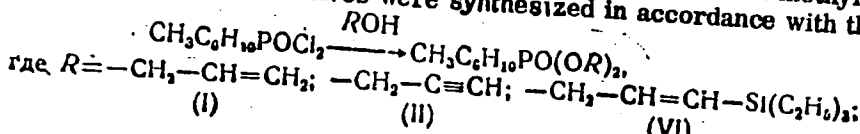
ORG: INKhP AN Azerb. SSR

TITLE: Synthesis of unsaturated esters of methylcyclohexylphosphonic acid

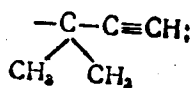
SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 5, 1965, 44-47

TOPIC TAGS: organic phosphorus compound, organosilicon compound, nonmetallic organic derivative, ester, chemical synthesis, IR analysis, spectroscopy, corrosion inhibitor

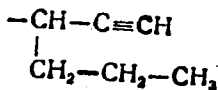
ABSTRACT: In order to study the reactivity and chemical properties of methylcyclohexylphosphonyl dichloride, some derivatives were synthesized in accordance with the reaction



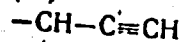
where



(III)



(IV)



(V)

Card 1/2

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2

Six different representatives (I-IV) of ethylenic and acetylenic derivatives of methylcyclohexylphosphonic acid were thus synthesized and described for the first time. The presence of a triple bond in dipropargyl methylcyclohexylphosphonate was established spectroscopically and also by preparing a silicon derivative. Infrared analysis showed that the addition of triethylsilane to the triple bond of dipropargyl methylcyclohexylphosphonate follows Farmer's rule of free radical addition, according to which the radical component, $-\text{Si}(\text{C}_2\text{H}_5)_3$, adds to the more hydrogenized carbon atom. A method of synthesis of silicon-phosphorus organic compounds was thus elaborated. Results of a preliminary study of the synthesized products showed that the dipropargyl ester (II) can be used as a steel corrosion inhibitor (in 15% HCl at 130°C). Orig. art. has: 2 figures and 1 table.

SUB CODE: 07 / SUBM DATE: 16Feb64 / ORIG REF: 002 / OTH REF: 001

Card 2/2 LC

PODOVINNIKOV, N.

Houses with one-family apartments in the city of Kiybyshev.
Zhil.stroi. no.4:14-16 '59. (MIRA 12:6)

1. Glavnyy arkhitekt g. Kuybysheva.
(Kuybyshev--Apartment houses)

GOSHEVA, A.Ye.; YERMAKOVA, M.P.; PODOZEROVA, N.P.

Effect of aurantin on ribonucleic acid and deoxyrinonucleic acid in cultures of human brain tumors. Antibiotiki 8 no.7: 614-618 JI '63 (MIRA 17:3)

1. Otdel infektsionnoy patologii i eksperimental'noy terapii infektsiy (zav. - chlen-korrespondent AMN SSSR prof. Kh.Kh. Planel'yes) Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR.

PODPALYY, A.F.

Prospects for improving the track system. Zhel. dor. transp.
41 no.2:28-34 F '59. (MIRA 12:3)

1. Nachal'nik Glavnogo upravleniya puti i sooruzheniy Ministerstva
putey soobshcheniya.
(Railroads--Track)

PODPERA, J.

"A preliminary monographic study on mosses. In French, German, and Latin. p. 89."

P. 89 (Aplikace Matematiky, Vol. 30, no. 3, 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 7, July 1958

PODPERA, Josef

Preliminary study on bryum genus; species of the northern
Eurasia. Prace CSAV Brno 34 no.2/3:49-102 '62.

KORMER, V.A.; PETROV, A.A.; SAVICH, I.G.; PODPORINA, T.R.

Kinetics and mechanism of butyllithium addition to vinylacetylene.
Zhur. ob. khim. 32 no.1:318-319 Ja '62. (MIRA 15:2)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета.
(Lithium) (Buteneyne)

PODPORKIN, V.G., dots., kand. tekhn. nauk

Classification of shafts on the basis of their rigidity. Vest.
mash. 39 no.3:64-67 Mr '59. (MIRA 12:4)
(Metal cutting)

PODPORKIN, V.G.

Cold straightening of nonrigid shafts. Trudy LPI no.191:110-138
'57.

(MIRA 11'9)

(Metals--Cold working)

PODPORKIN, V.G.

Errors in elastic deformations caused by machining nonrigid
shafts fastened in centers and stays. Trudy LPI no.191:139-150

'57.

(MIRA 11:9)

(Deformations (Mechanics)) (Turning)

PODPORKIN, V.G., kand.tekhn.nauk

Using lathe rests in machining nonrigid marine shafts.

Sudostroenie 24 no.7:53-56 J1 '58.

(Lathes--Attachments) (Shafting)

(MIRA 11:9)

PODRABINEK, P.A.

Accelerating erythrocyte sedimentation with BCG vaccine.

Lab.delo 4:9-12 S-O '58

(MIRA 11:11)

1. Iz gorodskoy ob'yedinennoy bol'nitsy (glavnyy vrach S.V. Afanas'yev) g. Elektrostal'.
(BCG)
(BLOOD—SEDIMENTATION)