

BELETSKAYA, I.P.; REUTOV, O.A.; GUR'YANOVA, T.P.

Reaction substituting a halogen for a mercury atom combined with saturated carbon atom. Izv. AN SSSR Otd.khim.nauk no.12:2178-2182 D '61. (MIRA 14:11)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Mercury compounds) (Iodine)

REUTOV, O.A.; BELETSKAYA, I.P.; ARTAMKINA, G.A.

Synthesis of some organomercury salts of the type  $p-X_2C_6H_4CH(HgBr)$   
COOR. Zhur.ob.khim. 30 no.10:3220-3223 0 '61. (MIRA 14:4)

1. Moskovskiy gosudarstvennyy universitet.  
(Mercury organic compounds)

REUTOV, O.A.; KHU KHUN-VEN, BELETSKAYA, I.P.; SMOLINA, T.A. (Moscow)

Isotope exchange kinetics of ethyl  $\alpha$ -bromomercuriphenylacetate  
with Hg<sup>203</sup>-tagged phenyl mercury bromide. Zhur.fiz.khim. 35  
no.11:2424-2428 N '61. (MIRA 14:12)

(Acetic acid)  
(Mercury--Isotopes)  
(Mercury compounds)

BELETSKAYA, I.P.; REUTOV, O.A.; ARTAMKINA, G.A.

Synthesis of some organomercuric salts of the type  $\text{XC}_6\text{H}_4\text{CH}(\text{HgBr})\text{CO}_2\text{C}_2\text{H}_5$ .  
Part 2. Zhur. ob khim. 32 no.1:241-244; Ja '62. (MIRA 15'2)  
(Mercury organic compounds) (Acetic acid)  
(Esters)

BELETSKAYA, I.P.; REUTOV, O.A.; AZIZYAN, T.A.

Reactions of the substitution of halogen for mercury atom  
combined with saturated carbon atom. Report No.4: Interaction  
between benzylmercury chloride and bromine in carbon  
tetrachloride. Izv. AN SSSR Otd.khim.nauk no.2:223-227 F '62.  
(MIRA 15:2)

1. Moskvskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Mercury compounds)  
(Bromine)

BELETSKAYA, I.P.; AZIZYAN, T.A.; REUTOV, O.A.

Substitution of the mercury atom combined with a saturated carbon atom by halogen. Report No.5: Interaction of benzyl mercury chloride with bromine in the presence of ammonium bromide in polar solvents. Izv.AN SSSR.Otd.khim.nauk no.3: 424-430 Mr '62. (MIRA 15:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Mercury compounds) (Bromine) (Substitution (Chemistry))

REUTOV, O.A.; BELETSKAYA, I.P.; ALEJNIKOVA, M.Ya.

Cleavage of a carbon-mercury bond under the effect of acids.  
Zhur. fiz. khim. 36 no.3:489-493 Mr '62. (MIRA 17:8)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

REUTOV, O. A.; BELETSKAYA, I. P.; ARTAMKINA, G. A.

Kinetics of symmetrization reaction of organomercury salts.  
Part 5: Effect of halogen substitutes in compounds of the  
type  $n = XG_6H_4CH(HgBr)COOC_2H_5$  on the rate of symmetrization  
under the action of ammonia. Zhur. fiz. khim. 36 no.12:2582-  
2588 D '62. (MIRA 16:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

(Halogens) (Substitution(Chemistry)) (Esters)



BELETSKAYA, I.P.; ARTAMKINA, G.A.; REUTOV, O.A.

"Cosymmetrization" reaction of benzyl mercury bromide with ethyl esters of  $\alpha$ -bromomercuriaryl acetic acids. Izv. AN SSSR. Otd. khim. nauk no.4: 765-767 Ap '63. (MIRA 16:3)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Mercury compounds) (Acetic acid)

REUTOV, O.A.; SOKOLOV, V.I.; BELETSKAYA, I.P.; RYABOKOBYLKO, Yu.S.

Study of electrophilic substitution reactions at a saturated carbon atom by the method of isotopic exchange. Report No.5: Isotopic exchange of ethyl ester of  $\alpha$ -bromomercuriphenylacetic acid with mercury bromide tagged with  $Hg^{203}$  in water-ethanol. Izv. AN SSSR. Otd.khim.nauk no.6:965-969 Je '63. (MIRA 16:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.  
(Acetic acid) (Mercury bromides)  
(Mercury isotopes)

REUTOV, O.A.; PRAYSNAR, Bronislav; BELETSKAYA, I.P.; SOKOLOV, V.I.

Study of electrophilic substitution reactions at a saturated carbon atom by the method of isotopic exchange. Report No.6: Kinetics of isotopic exchange of ethyl esters of  $\alpha$ -bromomercuriarylacetic acids with mercury bromide tagged with  $Hg^{203}$  in dimethylsulfoxide. Izv. AN SSSR. Otd.khim.nauk no.6:970-976 Je '63. (MIRA 16:7)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.  
(Acetic acid) (Mercury bromides) (Mercury isotopes)

BELETSKAYA, I.P.; AZIZYAN, T.A.; REUTOV, O.A.

Effect of oxygen-containing additions on the mechanism underlying the reaction of benzyl mercury chloride with bromine in carbon tetrachloride. Izv. AN SSSR. Ser.khim. no.7:1332-1333 J1 '63.  
(MIRA 16:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
(Mercury organic compounds)  
(Bromine)

BELETSKAYA, I.P.; ARTAMKINA, G.A.; REUTOV, O.A.

"Cosymmetrization" reaction of organomercury salts. Dokl. AN  
SSSR 149 no.1:90-93 Mr '63. (MIRA 16:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
2. Cheln-korrespondent AN SSSR (for Reutov).  
(Mercury organic compounds)  
(Chemical reaction, Rate of)

BELETSKAYA, I.P.; ANTANKINA, G.A.; SHEVLYAGINA, Ye.A.; REUTOV, O.A.

Synthesis of some organomercury salts of the type  $XC_6H_4CH(HgBr)CO_2C_2H_5$ .  
Zhur.ob.khim. 34 no.1:321-324 Ja '64. (MIRA 17:3)

ARTAMKINA, G.A.; BELETSKAYA, I.P.; REUTOV, O.A.

"Anomalous" effect of substituents in S reactions. Dokl.  
AN SSSR 153 no.3:588-591 N '63. (MIRA 17:1)

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

SAVEL'YEV, Ye.P.; RYABOVA, T.S.; BELETSKAYA, I.P.; SHABAROVA, Z.A.

Study of the kinetics of hydrolysis of the phosphoamide bond in  
adenilyl-(5'-~~4~~)-phenylalanine. Dokl. AN SSSR 155 no.6:1457-1459  
Ap '64. (MIRA 17:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.  
Predstavleno akademikom A.N.Belozerskim.



BELETSKAYA, I.P.; FETISOVA, T.P.; REUTOV, G.A.

Influence of the substituents in the electrophilic bimolecular substitution reaction. Dokl. AN SSSR 155 no. 5: 095-1097 Ap '64. (MIRA 17:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.
2. Chlen-korrespondent AN SSSR (for Reutov).

REUTOV, O.A.; UGLOVA, E.V.; BELETSKAYA, I.P.; SVETLANOVA, T.B.

Reactions of substitution by halogen of a mercury atom  
combined to saturated carbon atom. Report No.7: Kinetics  
and stereochemistry of the reaction of optically active  
sec. butylmercury bromide in carbon tetrachloride. Izv.  
AN SSSR. Ser. khim. no.8:1383-1387 Ag '64.

(MIRA 17:9)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova.

REUTOV, O.A.; BELETSKAYA, I.P.; ARTAMKINA, G.A.

Four-linked cyclic transition state in the reactions of  
electrophilic substitution of the organomercury compounds.  
Zhur. ob. khim. 34 no.8:2817-2818 Ag '64. (MIRA 17:9)

BELETSKAYA, I.P.; KARPCV, V.I.; REUTOV, O.A.

Stereochemistry of the reaction of the cis-trans isomers of styryl  
mercury bromide with bromine. Izv.AN SSSR.Ser.khim. no.9:1707-1709  
S '64. (MIRA 17:10)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

BELETSKAYA, I.P.; BUTIN, K.P.; REUTOV, O.A.

Reaction of some organomercury compounds with diazonium salts. Izv.  
AN SSSR.Ser.khim. no.9:1711-1712 S '64. (MIRA 17:10)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

BELETSKAYA, I.P.; ERMANSON, A.V.; REUTOV, O.A.

Electrophilic substitution at the aromatic carbon atom. Report No.1:  
Cleavage of the C-Hg bond in a molecule of aromatic organomercury  
compounds under the action of halogens. Izv. AN SSSR Ser. khim. no.2:  
231-239 '65. (MIRA 18:2)

1. Moskovskiy gosudarstvennyy universitet.

BELETSKAYA, I.P.; MYSHKIN, A.Ye.; REUTOV, O.A.

Electrophilic substitution at the aromatic carbon atom. Report  
No.2: Kinetics and mechanism of protolysis of phenyl mercury  
bromide in 90% aqueous dioxane. Izv. AN SSSR Ser. khim. no.2:  
240-249 '65. (MIRA 18:2)

1. Moskovskiy gosudarstvennyy universitet.

BELETSKAYA, I.P.; KARPOV, V.I.; REUTOV, O.A., akademik

Mechanism of electrophilic and homolytic substitution at the  
olefin carbon atom. Dokl. AN SSSR 161 no.3:586-589 Mr '65.  
(MIRA 18:4)



BELETSKAYA, I.P.; KARPOV, V.I.; MOSKALENKO, V.A.; REUTOV, O.A., akademik

Protolysis mechanism of cis- and trans- $\beta$ -chlorovinyl mercury chlorides under the effect of HCl and DCl. Dokl. AN SSSR 162 no.1:86-89 My '65. (MIRA 18:5)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.

BELETSKAYA, I.P.; FEDOROV, L.A.; MOSKALENKO, V.A.; REUTOV, O.A.

Nuclear magnetic resonance spectrum of dibenzyl mercury. Izv.  
AN SSSR. Ser. khim. no.5:933 '65. (MIRA 18:5)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova.

PENTIN, Yu.A.; BELETSKAYA, I.P.; PRAYSNAR, B.; REUTOV, O.A.

Infrared and ultraviolet spectra of organomercury compounds. Report No.1;  
Infrared spectra of benzyl mercury halides. Izv. AN SSSR. Ser. khim. no.7;  
1180-1188 '65. (MIRA 18:7)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.

BELEFSKAYA, L.M., kandidat meditsinskikh nauk

Clinical characteristics of ovarian fibromas. Akush. i gin. no.3:  
54-56 My-Je '54. (MIRA 7:8)

1. Iz Instituta akusherstva i ginekologii (dir. L.G.Stepanov,  
nauchnyy rukovoditel' prof. P.A.Beloshapko) Ministerstva zdравo-  
okhraneniya SSSR.

(OVARIES, neoplasms  
\*fibroma, clin. aspects)

(FIBROMA,  
\*ovaries, clin. aspects)

**BELETSKAYA, L.M., kandidat meditsinskikh nauk**

**Delivery in breech presentation. Akush. i gin. no.6:39-42 H-D '54.  
(MIRA 8:2)**

**1. Iz kafedry akusherstva i genekologii (zav.-prof. K.N.Zhmakin)  
I Moskovskogo ordena Lenina meditsinskogo instituta.  
(LABOR PRESENTATION  
pelvic, management)**

USSR/Soil Science - Biology of Soils.

J

Abs Jour : Ref Zhur Biol., No 22, 1958, 100046

Author : Podrazhanskaya, D.S., Beletskaya, L.M.

Inst : Khar'kov' Agricultural Institute

Title : The Effect of Growth-Activating Agents during Their Introduction into the Soil Together with Mineral Fertilizers on the Azotobacter Development.

Orig Pub : Zap. Khar'kovsk. s.-kh. in-ta, 1957, 13 (50), 53-58

Abstract : The count of azotobacter on soil slides, prepared from the soil fertilized by granulated superphosphate (I), I plus different doses of heteroauxin or I plus different doses of the potassium salt of heteroauxin, on which under laboratory conditions, in the course of 10 preceding days, wheat had been germinated, indicated that heteroauxin and its potassium salt noticeably stimulated

Card 1/2

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BELETSKAYA, L.M. (Moskva, B-296, Lomonosovskiy pr., d.14, kv.22)

On granulosa-cell tumors of the ovary. Vop.onk. 5 no.9:305-309 '59.  
(MIRA 12:12)

1. Iz kafedry akushestva i ginekologii (sav. - prof. K.N. Zhvakina)  
I Moskovskogo ordena Lenina meditsinskogo instituta im. Sechenova.  
(GRANULOSA CELL TUMOR case reports)  
(OVARIES neopl.)

BELETSKAYA, L.M.

Certain hormon-producing tumors of the ovary. Sovet. med. 23 no.2:  
100-105 F '59. (MIRA 12:3)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. K.M. Zhmakin).  
I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.  
Sechenova.

(OVARIES, neoplasms  
masculinizing & feminizing tumors (Rus))



BELETSKAYA, L.M. (Moskva)

Hormone-producing tumors of the ovary. Fel'd. i akush. 26 no.9:19-  
23 S '61. (MIRA 14:10)

(OVARIES--TUMORS)

(HORMONES, SEX)

BELETSKAYA, L.M. (Moskva)

Modern anesthesia in gynecological and obstetrical surgery.  
Fel'd. i akush. 26 no.12:20-24 D '61. (MIRA 14:12)  
(ANESTHESIA IN OBSTETRICS) (GYNECOLOGY)

ANISKOVA, F. D.; BELETSKAYA, L. M.

Thio-TEPA treatment of neglected forms of ovarian cancer. Vop.  
onk. 8 no.2:68-71 '62. (MIRA 15:2)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. K. N. Zhmakin)  
I Moskovskogo ordena Lenina meditsinskogo instituta im. I. M.  
Sechenova.

(THIO-TEPA) (OVARIES—CANCER)

ANISKOVA, F. D.; BELETSKAYA, L. M.; PETUNINA, S. A.

Menstrual and parturient functions in workers at "Kauchuk"  
factory. Akush. i gin. no.2:89-92 '62. (MIRA 15:6)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. K. N.  
Zhmakin) I Moskovskogo ordena Lenina meditsinskogo instituta  
imeni I. M. Sechenova i mediko-sanitarnoy chasti zavoda  
"Kauchuk" (glavnyy vrach N. V. Mikhaylovskiy)

(MENSTRUATION) (PREGNANCY)

BELETSKAYA, L.M. (Moskva, V-296, Lomonosovskiy prospekt, d.14, kv.22)

Brenner tumors of the ovaries. Vop. onk. 9 no.9:64-67 '63.

(MIRA 17:9)

1. Iz kafedry akusherstva i ginekologii 1-go Moskovskogo ordena  
Lenina meditsinskogo instituta imeni I.M. Sechenova (nav. kafedroy-  
zasluzhennyy deyatel' nauki prof. K.N. Zhmakin).

BELETSKAYA, L. V.

Cand. Biological Sci.

"Effect of Colchicine, Its Derivatives and Natural Analogs on the Growth of Normal and Tumorous Tissue." Sub 26 Oct 51, All-Union Sci Res Chemicopharmaceutical Inst imeni Sergo Ordzhonikidze (VNIKhFI), Ministry of Public Health USSR.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

BELETSKAYA, L. V. and SMIRNOV, P. V.

"Experimental Rheumatism in Monkeys" a report prepared at Sukhumi Medico-Biological Station, AMS USSR, 1954.

So: Review of Eastern Medical Sciences, Munich, No. 2, 1956.

BELETSKAYA, L. V., and SMIRNOV, P. V. (deceased)

"Experimental Rheumatism in White Rats." Proceedings of Inst. Epidem and Microbiol im. Gemaleya 1954-56.

List of Works Sponsored by the Institute [Authors are not identified with any specific division, laboratory, or other organizational component of the institute.] Inst. Epidem and Microbiol im. Gemaleya AMS USSR.

SO: Sum 1186, 11 Jan 57.



BELETSKAYA, L. V.  
USSR/Medicine - Rheumatism

FD-1637

Card 1/1 : Pub. 148-17/28

Author : Smirnov, P. V. and Beletskaya, L. V.

Title : Problems involved in the etiology and pathogenesis of rheumatism

Periodical : Zhur. mikro, epid. i immun. 7, 67-72, Jul 1954

Abstract : A review of recent and current theories on the etiology of rheumatism is given and the names of Soviet and non-Soviet scientists connected with them are mentioned. The role of desoxycorticosterone and hemolytic streptococci, both alone and in combination, as the agents which produce experimental rheumatism in white rats is discussed in detail. Desoxycorticosterone alone did not produce rheumatism. Hemolytic streptococci alone caused rheumatism in about a third of the experimental animals. A combination of these two agents produced experimental rheumatism in 91 percent of the animals. No references are cited.

Institution : --

Submitted : March 1, 1954

Beletskaya, L.V.

Experimental rheumatism in the white rat. P. V. Svirnov and L. V. Beletskaya. *Zhur. Mikrobiol., Epidemiol., Immunobiol.* 1933, No. 12, 34-7. Young white rats (40-70 g.) were administered intraperitoneally large weekly doses of  $\beta$ -hemolytic streptococcus group A. A no. of rats of this group simultaneously received daily 4-6 mg. of dcoxycort: nothing. Control animals received only I or nothing. After 30-60 days one rat out of 70 receiving only I showed hypertrophic inflammation of joints; no rheumat: changes were noted. The adrenal glands were reduced to 1/2 normal size in animals receiving I. Out of 70 rats receiving only the streptococcus 9 showed definite changes in joints after the first inoculation and 15 developed arthritic changes later. The adrenals in the arthritic rats weighed the same as in the controls. Of 20 rats receiving I and the streptococcus 21 developed arthritic changes in the joints and the wt. of the adrenals was 1/2 that of the controls. Histological exam. of the tissues of the arthritic rats revealed cell proliferation in connective tissue of myocardium and near the vessels of the heart, forming small lumps resembling granuloma of Ashov-Talalaev. J. A. Stekol

USSR/General Problems of Pathology - Pathophysiology of the Infectious Process U.

Abs Jour : Ref Zhur - Biol., No 2, 1959, 8654

Author : Borodiyuk, N.A., Beletskaya, L.V.

Inst : -

Title : Experimental Streptococcus Infection in the Light of the Role of the Streptococcus in the Pathogenesis of Rheumatic Fever

Orig Pub : Zh. mikrobiol., epidemiol. i immunobiol., 1957, No 10, 66-70

Abstract : Virulent cultures of the hemolytic streptococcus were repeatedly injected into rabbits intraconjunctivally and intravenously into rats. A part of the rats received DOCA simultaneously. In a considerable part of the animals a polypoid-verrucous endocarditis, myocarditis or aseptic arthritides were found. No Aschoff bodies nor sclerotic changes in the myocardium typical of rheumatic

Card 1/2

USSR/General Problems of Pathology - Pathophysiology of the U.  
Infectious Process

Abs Jour : Ref Zhur - Biol., No 2, 1959, 8654

fever were found. The anti-hyaluronidase, antistreptolysin O and agglutinin titers increased considerably in the rats. Large doses of DOCA did not exert any notable effect on the course of the pathologic process. -- N.D. Beklemishev

Card 2/2

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SMIRNOV, P.V. [deceased]; BELITSKAYA, L.V.; BORODIYUK, N.A.

Experimental streptococcal infection in *Macacus rhesus* monkeys;  
nature of rheumatic fever and rheumatoid diseases. *Zhur.mikro-*  
*biol.epid. i immn.* 30 no.5:61-66 My '59. (MIRA 12:9)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei  
AN SSSR.

(STREPTOCOCCAL INFECTIONS, exper.  
in monkeys (Rus))

SMIRNOV, P.V.; BELETSKAYA, L.V.; BORODIYUK, N.A. (Moskva)

Morphological changes in experimental polyarthrititis induced in white rats by  $\beta$ -hemolytic Streptococcus A. Arkh. pat. 21 no.9: 16-21 '59. (MIRA 14:8)

1. Iz laboratorii kokkovykh infektsiy Otdela ranevykh infektsiy (zav. - deystvitel'nyy chlen AMN SSSR prof. G.V.Vygodchikov) Instituta epidemiologii i mikrobiologii imeni N.F.Gamalei AMN SSSR (dir. - prof. S.N.Murovtsev). (STREPTOCOCCAL INFECTIONS) (ARTHRITIS)

BELETSKAYA, L.V.

"Changes in the organs of experimental animals caused by the introduction of streptococcal culture group A and homogenate of homologous tissue, .

Report submitted to the Intl. Congress of Microbiology,  
Montreal, Canada 19-25 Aug 1962

LYAMPERT, I.M.; BELETSKAYA, L.V.; BORODIYUK, N.A.; SMIRNOVA, M.N.

Antibodies reacting with human heart tissue in antistreptococcal rabbit serum. Zhur. mikrobiol., epid. i immun. 33 no.2:62-68 F '62. (MIRA 15:3)

1. Iz Instituta epidemiologii i mikrobiologii imeni N.F. Gamalei AMN SSSR.

(RHEUMATIC HEART DISEASE)  
(SERUM) . (STREPTOCOCCUS)  
(ANTIGENS AND ANTIBODIES)



LYAMPERT, I.M.; GALACH\*YANTS, O.P.; BELETSKAYA, L.V.; SMIRNOVA, M.N.

Antibodies against homologous heart tissue in the serums of  
animals immunized by streptococcus. Vop.revm. 3 no.1:3-10  
Ja-Mr '63. (MIRA 16:4)

1. Iz Instituta imeni N.F.Gamalei (dir. - prof. P.A.Verashilova)  
AMN SSSR.

(STREPTOCOCCUS) (ANTIGENS AND ANTIBODIES)  
(HEART--MUSCLE)

BELETSKAYA, L.V.; CHZHAN VEN'-YUY

Utilization of filtrates of hyaluronidase-active strains of  
Streptococcus in histochemical practice. Arkh. pat. no.2:  
66-69\*63 (MIRA 16:11)

1. Iz otdela streptokokkovykh infektsiy (zav. - doktor med.  
nauk I.M.Iyampert) Instituta epidemiologii i mikrobiologii  
imeni N.F.Gamalei AMN SSSR (dir. - prof. P.A.Vershilova).

\*

BELETSKAYA, L.V.; LYAMPERT, I.M.

Changes in the organs of experimental animals caused by the introduction of -hemolytic streptococcal culture and homologous homogenate of the connective tissue. Vop.revm. 1 no.3:25-31 JI-S '61. (MIRA 16:4)

1. Iz laboratorii streptokokkovykh infektsiy (sav. - doktor (med.nauk P.V.Pavlov) Instituta eksperimental'noy meditsiny imeni N.F.Gamalei AMN SSSR (dir. - prof. S.N.Muromtsev [deceased])).  
(IMMUNITY) (STREPTOCOCCAL INFECTIONS) (TISSUE EXTRACTS)

BELETSKAYA, L.V. (Moskva)

Development of experimental arteritis in animals following introduction of group A streptococcus culture mixed with the homogenate of homologous connective tissue. Arkh. pat. 27 no.5:24-29 '65. (MIRA 18:5)

1. Otdel streptokokkovykh infektsiy (zav. - doktor med.nauk I.M. Iyampert) Instituta epidemiologii i mikrobiologii imeni Gamalei (dir. - chlen-korrespondent AMN SSSR P.A.Vershilova) AMN SSSR.

BELEISKAYA, L. Ye., TEREKHOVA, T. C.

1947- Tashkent Medical Inst.

"Causes of Leucomyosarkoma of the Heart" Arkhiv. Patol II. No. 1, 1949.

Mbr., Chair Pathological Anatomy, -1947-: Mbr., Propedeutic Therapeutic Clinic, -1947.

BELETSKAYA, L. Ye.

Antitoxic function of the liver in pregnancy. *akush. gin. no.5:31-33*  
Sept-Oct 1953. (CINL 25:4)

1. Candidate Medical Sciences. 2. Of the Propedeutic Department of  
Internal Diseases (Head -- Prof. G. A. Bussel', deceased) of the  
Sanitation and Pediatrics Faculties of Tashkent Medical Institute.

BELETSKAYA, L-YE.

USSR/Human and Animal Morphology. Circulatory System.

S-2

Abs Jour: Referat Zh.-Biol., No 1, 10 January 1958, 2848

Author : Beletskaya, L. Ye.

Inst : \_\_\_\_\_

Title : Contribution to the Subject of Congenital Isthmus Aortae.

Orig Pub: Za zdravookhr. Uzbekistana, 1955, No 6, 50-53.

Abstract: A case of congenital isthmus aortae, accompanied by an elevated blood pressure in the upper and normal pressure in the lower extremities, was presented. In these cases hypertention probably depended upon an interference with the central regulatory mechanism.

Card : 1/1

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EXCERPTA MEDICA Sec 6 Vol 13/1 Internal Med. Jan 59

172. CAPILLARY PERMEABILITY AND CHANGES IN PLASMA PROTEINS IN ENTERITIS AND ENTEROCOLITIS (Russian text) - Beletskaya L.S. - ZDRAVOOKHR. UZ. 1956, 3 (31-35)

Capillary permeability was investigated in 59 patients by the Landis and Konchalovski tests; the McClure-Aldrich test threw light on the hydrophilic properties of the tissues, and total plasma proteins were estimated by refractometry. Increased capillary permeability, attributed to histamine-like substances released by the intestinal tissues, was found in chronic and especially in acute enteritis and enterocolitis. The majority of cases also showed hypoproteinaemia, most marked (average 5.54%) in chronic enteritis and enterocolitis. Konchalovski's test was found to be less sensitive than that of Landis. The data obtained show the need for more comprehensive treatment of both acute and chronic intestinal diseases. (S)



~~BELETSKAYA, L.Ye., dotsent; TEREKHOV, O.G.~~

Case of echinococcus of the heart. Med.zhur.Uzb. no.6:75-77  
Je '58. (MIRA 13:6)

1. Iz propedevticheskoy terapevticheskoy kliniki sanitarno-  
gigiyenicheskogo i pediatricheskogo fakul'tetov (sav. - prof.  
E.I. Atakhanov) Tashkentskogo gosudarstvennogo meditsinskogo  
instituta.

(HEAR--HYDATIDS)

BELETSKAYA, L.Ye., dotsent

Use of nikodine. Med. zhur. Uzb. no.5:58-60 My '61. (MIRA 14:6)

1. Iz kafedry propedvtiki vnutrennikh bolezney sanitarno-gigiyenicheskogo i pediatricheskogo fakul'tetov (zav. - prof. E.I.Atakhanov) Tashkentskogo gosudarstvennogo meditsinskogo instituta.

(PYRIDINETRICARBOXYLIC ACID)

BELETSKAYA, M. K. Cand Biol Sci -- (diss) "The role of acids in  
a tricarboxic oxidizing cycle in the synthesis of <sup>milkfat</sup> ~~lactic acid~~ in the  
organism of lacti<sup>ating</sup> ~~ating~~ animals." Kiev, 1957. 15 pp. (Min Agr UkSSR.  
Ukrainian Acad Agr Sci. Chair of Organic and Biol Chemistry.)

100 copies.

(KL, 8-58, 104)

-12-

USSR / Farm Animals. Cattle.

Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7356

Author : Gulyy, M. F.; Pshenichnyy, P. D.; Vasilenko,  
D. Ya.; ~~Beletskaya, M. K.~~; Zhadan, A. B.;  
Kurbatov, V. I.; Os'makova, M. M.; Chizh-  
skaya, G. Ya.; Shevchenko, N. I.

Inst : Not given

Title : Ways of Raising the Milk's Fat Content in  
Cows

Orig Pub : Vestn. s.-kh. nauk, 1957, No 8, 41-50

Abstract : In repeated experiments it was established  
that when brewer's yeast (3.3 liters per  
head daily) was temporarily fed to cows,  
their milk's fat content became increased  
(by 0.4 percent on the average) for a compa-  
ratively long time. When they were fed bre-

Card 1/2

15

USSR / Farm Animals. Cattle. Q

Abs Jour ! Ref Zhur - Biologiya, No 2, 1959, No. 7356

wer's yeast and then sulfuric acid ammonia  
(60-75 g per cow daily, the milk's average  
fat content was additionally increased by  
0.20-0.25 percent.

Card 2/2

USSR / Farm Animals: General Problems. Q

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7259

serves as a source for lactic fat, is related to the citric acid metabolism. As lactating sheep and cows were fed acetic acid sodium, the percentage of the milk's fat was raised (by 0.2-0.6 percent) as well as its daily secretion (by 4.0-19.3 percent). Increases in the percentage of fat and of its daily secretion were observed when citric acid and amber acid sodium were added to feeds. In the first case it was increased by 0.1-1.2 and 3.1-20 percent, and in the second case by 0.5-1.0 and by 11.7-28.5 percent, respectively.

Card 2/2

BELETSKAYA, M. P.

AVDEYEV, V.I.; BELETSKAYA, M.P. (Khar'kov)

Valerian Grigor'evich Lashkevich, Botkin's successor. Klin. med.  
35 no.1:124-125 Ja '57 (MLRA 10:4)

1. Iz kafedry propedevtiki vnutrennikh bolezney lechnogo  
fakul'teta (zav. kafedroi-zasluzhennyi deyatel' nauki prof.  
V.M. Kogan-Yasnyy) Khar'kovskogo meditsinskogo instituta.

(BIOGRAPHIES

Lashkevich, Valerian G.)

BELETSKAYA, N.I.

Effectiveness of outpatient treatment of rheumatic fever in  
the prevention of relapses. Sov. med. 27 no.2:12(-127 F '64.  
(MIRA 17:10)

1. Kardiorevmatologicheskiy kabinet (zav. N.I. Beletskaya)  
mediko-sanitarnoy chasti (glavnyy vrach A.S. Luchanskiy, zav.  
terapevticheskim otdeleniyem M.N. Gordiyenko) khlopchatoburazh-  
nogo kombinata, Kherson.



L 11992-66

ACC NR: AP6000734

SOURCE CODE: UR/0251/65/039/003/0599/0605

AUTHOR: Beletskaya, R. P.

17B

ORG: Tbilis State University (Tbilisskiy gosudarstvennyy universitet)

TITLE: Effect of free purines and pyrimidines on ammonia production and glutamine breakdown in extracts from muscle tissue

SOURCE: AN GruzSSR. Soobshcheniya, v. 39, no. 3, 1965, 599-605

TOPIC TAGS: biologic metabolism, biologic respiration, cell physiology, organic nitrogen compound, glutamic acid

ABSTRACT: This work aimed at determining whether glutamine interacts with purine bases in incubated muscle tissue to form a compound which would liberate ammonia. The study involved the effect of the following bases on ammonia production in the presence of endogenous and exogenous glutamine: adenine, guanine, xanthine, hypoxanthine, uracyl and cytosine. The tests were conducted with incubated extracts from a homogenate of rat muscle tissue and the products under study were determined by isothermic distillation, chemical analysis and spectrophotometry. The presence of hypoxanthine at incubation increased ammonia by 1.2 mg%. Glutamine utilization at incubation was seen in the decrease of amidic

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L 11992-66

ACC NR: P6000734

nitrogen by 3.3 mg%; this figure did not change significantly upon hypoxanthine addition. Addition of both glutamine and hypoxanthine to incubation increased ammonia by more than 3.3 mg%, which was not completely compensated by glutamine breakdown. Analogous tests with adenine showed its lesser effect on ammonia production (increase by 0.7mg%) even upon glutamine addition. Adenine, like hypoxanthine, increased glutamine breakdown. Xanthine increased ammonia production insignificantly but favored glutamine breakdown both with and without glutamine addition; thus glutamine was used for xanthine amination. Uracyl had the same effect as xanthine. It was concluded that hypoxanthine, xanthine and uracyl have a positive effect on ammonia production in the presence of glutamine. Xanthine made intensive use of the amidic nitrogen of glutamine. Adenine had little effect on either ammonia production or glutamine breakdown. Guanine and cytosine had no effect. Orig. has: 4 tables and 4 figures.

SUB CODE: 06, 07/ SUBM DATE: 22Apr65/ ORIG REF: 006/ OTH REF: 002

KW  
Card 2/2

BELETSKAYA, S.N.

Improvement of the method of gas feed in the extraction of disseminated bitumens from rocks using high pressure equipment. Trudy VNIGRI no.212. Geokhim.sbor. no.8:246 '63. (MIRA 16:12)

BELETSKAYA, S.N.

Modeling the process of the primary migration of petroleum in a  
monophase gas condition. Trudy VNIGRI no.227 Geokhim.sbor. no.9:  
57-63 '64.

(MIRA 18:1)

ZHIZHNEVSKIY, G.O.; BELETSKAYA, T.S.

New motion-picture equipment in television. Tekh.kino i telev. 4  
no.10:8-9 0'60. (MIRA 13:10)  
(Motion pictures and television) (Television--Equipment and supplies)

ACCESSION NR: AP4012185

S/0191/64/000/002/0017/0019

AUTHORS: Omel'chenko, S. I.; Sorokin, V. P.; Tkachuk, B. M.;  
Beletskaya, T. V.; Zubkova, Z. A.; Piotrkovskaya, V. G.;  
Safonov, A. I.

TITLE: Unsaturated polyglycol maleinate resins modified by anthracene

SOURCE: Plasticheskiye massy\*, no. 2, 1964, 17-19

TOPIC TAGS: unsaturated polyglycol maleinate resin, anthracene,  
unsaturated polyester resin, glass-reinforced plastic, maleic an-  
hydride, contact method, filler, binder, heat resistance

ABSTRACT: Effort directed toward broadening the raw material base  
for synthesis of unsaturated polyester resins is acquiring great  
value in connection with the expansion of glass-reinforced plastic  
production. Unsaturated polyester resins were synthesized by two  
methods: (1) joint polycondensation of maleic anhydride with additive  
of anthracene and glycol (ethylene glycol or diethylene glycol).  
(2) introduction of anthracene during condensation polymerization of  
glycols and maleic anhydride. Two problems were simultaneously

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ACCESSION NR: AP4012185

solved: obtaining unsaturated polyester bonds with improved properties and the expansion of the raw material base for their production. Optimum conditions for the process were studied and it was established that stable resins can be obtained by synthesis in one stage (22-23 hrs.) and in a two-stage process (16-27 hrs.). Glass-reinforced plastic was prepared on the basis of resins derived by the contact method; glass cloth of brand T and ACTT (b) C, with paraffin lubricant were used as filler. Physical-mechanical testing indicates that the resins modified by additive or anthracene can be used as binders. Glass-reinforced plastic based on resin of certain brands (PNA-D-2, PNAD-E-3, PNAD-2.5) possess increased heat resistance and the best physical-mechanical properties.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 26Feb64

ENCL: 00

SUB CODE: CH, MA

NR REF SOV: 001

OTHER: 003

Card 2/2

BELETSKAYA, T.V. [Bilets'ka, T.V.]; ZIBKOVA, Z.A.; MEL'CHENKO, S.I.;  
PIOTRKOVSKAYA, V.G. [Piotrkovs'ka, V.H.]; TRACHUK, B.M.

Unsaturated polyester resins with increased heat resistance and  
improved dielectric properties for the manufacture of glass  
plastics. Khim. prom.[Ukr.] no.1:5-8 Ja-Mr '65. (MIRA 18:4)



L 62171-65 EPF(c)/EMP(j)/ENT(m)/T. Pc-l/Pr-l JAJ/RM

ACCESSION NR: AP5014683

UR/0191/65/000/006/0003/0006  
678.674'420'448-134.434.2

AUTHOR: Tkaohuk, B.M.; Omel'chenko, S.I.; Zubkova, Z.A.; Piotrkovskaya, V.G.;  
Beletskaya, T.V.

TITLE: Effect of initiating systems on the copolymerization of anthracene-modified  
polyglycol maleate resin with styrene

SOURCE: Plasticheskiye massy, no. 6, 1965, 3-6

TOPIC TAGS: copolymerization, polymaleate, styrene copolymer, polyglycol resin,  
anthracene modifier, polymerization initiator, polymerization accelerator, cold hardening

ABSTRACT: The article describes systems for cold hardening, consisting of one initiator  
and one accelerator, and also multicomponent systems consisting of two initiators and one  
accelerator, or one initiator and two accelerators. Two-component systems consisting  
of peroxides of methylethyl ketone and cyclohexanone with a cobalt accelerator were  
found to be the most suitable for the cold hardening of the anthracene-modified polyglycol  
maleate resin PNA-ED-2. Three-component systems (methylethyl ketone peroxide —  
benzoyl peroxide — cobalt naphthenate; or cyclohexanone peroxide — isopropylbenzene  
hydroperoxide — cobalt naphthenate) have no advantages over two-component systems.

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L 62171-65

ACCESSION NR: AP5014883

The use of diethylaniline as an additional accelerator in the systems isopropylbenzene hydroperoxide - cobalt naphthenate and methylethyl ketone peroxide - cobalt naphthenate leads to a marked retardation of gelling action without causing a change in physicommechanical properties. Orig. art. has: 6 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: OC

NO REF SOV: 003

OTHER: 003

RC  
Card 2/2

TKACHUR, D.M.; OMEL'CHENKO, S.I.; ZUBKOVA, Z.A.; PIOTRKOVSKAYA, V.G.;  
~~BELETSKAYA, T.V.~~

Effect of initiating systems on the copolymerization of anthracene  
modified glycol maleic resins with styrene. Plast.massy no.6:3-6  
'65.

(MIRA 18:8)

BELETSKAYA, Vanda Vladimirovna; MOKEYEV, K.Ia., nauchnyy red.,kand.tekhn.nauk;  
ZLENKO, G.A., red.; ANDREYEVA, L.S., tekhn.red.

[Technology and aesthetics] Tekhnika i estetika. Moskva,  
Izd-vo VTsSPS Profizdat, 1962. 95 p. (MIRA 15:5)

1. Uchenyy sekretar' Instituta okhrany truda Vsesoyuznogo  
tsentral'nogo soveta profsoyuzov (for Mokeyev).

(Industrial hygiene)

SAVITSKAYA, M.N.; KHOLODOVA, Yu.D.; BELETSKAYA, V.Ya.

Synthesis of polymeric soil conditioners. Nauch.trudy Ukr.  
nauch.-issl.inst.fiziol.rast. no.23:200-204 '62. (MIRA 16:2)  
(Soil conditioners) (Polymers)

PROTSENKO, D.F.; MISHUSTINA, P.S.; BELETSKAYA, Ye.K.

Some features of heterotic corn plants in connection with frost  
resistance. Fiziol. rast. 11 no.4:720-725 J1-Ag '64.

(MIRA 17:11)

1. Ukrainskiy nauchno-issledovatel'skiy institut fiziologii  
rasteniy AN UkrSSR, Kiyev.

BELETSKAYA, Ye.K., [Bilets'ka, O.K.]

Dynamics of the formation of green plastids in potato leaves  
as related to soil conditions. Ukr. bot. zhur. 20 no.2:35-39  
'63. (MIRA 16:6)

1. Ukrainskiy nauchno-issledovatel'skiy institut fiziologii  
rasteniy.

(Chromatophores) (Crops and soils)  
(Potatoes)

TSVETKOV, N.S.; BELETSKAYA, Ye.S.

Polymeric peroxides of dibasic organic acids. Ukr. khim.  
zhur. 29 no.10:1072-1075 '63. (MIRA 17:1)

1. L'vovskiy gosudarstvennyy universitet im. Ivana Franko.



TSVETKOV, N.S.; BELETSKAYA, Ye.S.

Kinetics of mass polymerization of styrene under the effect of  
polymeric peroxide of aselaic acid. Ukr.khim.zhur. 29 no.12:  
1289-1294 '63. (MIRA 17:2)

1. L'vovskiy gosudarstvennyy universitet im. Ivana Franko.

L 53918-65 EWT(m)/EPF(c)/ENP(j)/T Pc-4/Pr-4 RM

ACCESSION NR: AP5011421

UR/0073/65/031/004/0387/0392

AUTHOR: Tsvetkov, N. S., Beletskaya, Ye. S.

TITLE: Kinetics and mechanism of styrene polymerization in the presence of the polymeric peroxide of pimelic acid

SOURCE: Ukrainskiy khimicheskij zhurnal, v. 31, No. 4, 1965, 387-392

TOPIC TAGS: styrene polymerization, polymerization kinetics, pimelic acid peroxide, polymeric peroxide, dicarboxylic peroxide, polymerization initiator, chain propagation

ABSTRACT: In order to compare the initiating properties of polymeric peroxides of the homologous series of dibasic organic acids, the authors studied the kinetics of styrene polymerization initiated by a polymeric peroxide of pimelic acid at various temperatures and concentrations of initiator and monomer. The rates, order of reaction with respect to the initiator and monomer, and polymerization rate constants were calculated for the initial period of the process. As the temperature and monomer concentration decrease, the participation of primary radicals (formed by the thermal decomposition of the initiator molecules in the breaking of kinetic chains) increases. In the process of polymerization, only 1-, 2-peroxide bonds are broken in the polymeric molecule of pimelic acid peroxide; the remaining groups are broken by reacting with the growing polymer radicals. This

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ACCESSION NR: AP5011421

leads to a rapid consumption of the initiator and hence to a considerable slowing down of the polymerization. This deceleration is greater the lower the initial peroxide concentration. The reaction of chain propagation through the peroxide molecules was established; in contrast to the usual low-molecular initiators, chain propagation via peroxide bonds by an intramolecular mechanism is possible in the case under consideration. Orig. art. has: 2 figures, 3 tables and 2 formulas.

ASSOCIATION: L'vovskiy gosudarstvennyy universitet im. Ivana Franko (L'vov State University)

SUBMITTED: 18Dec63

ENCL: 00

SUB CODE: OC

NO REF SOV: 003

OTHER: 003

*Doc*  
Card

2/2

JS

*BELETSKIY, A.*

BELETSKIY, A.

Results of an audit. Fin.SSSR 16 no.4:62-64 Ap '55. (MIRA 8:3)  
(Ukraine---Commerce)

BELETSKIY, A. F.

BELETSKIY, A. F. -- "INVESTIGATION OF PROBLEMS OF DESIGNING CERTAIN CLASSES OF LINEAR  
ELECTRICAL CIRCUITS ACCORDING TO THEIR ASSIGNED FREQUENCY CHARACTERISTICS."  
SUB 22 MAY 52, INST OF AUTOMATICS AND TELEMECHANICS, ACAD SCI USSR (DISSERTATION  
FOR THE DEGREE OF DOCTOR IN TECHNICAL SCIENCES)

SO: VECHERNAYA MOSKA, JANUARY DECEMBER 1952

BELETSKIY, A.F.

Characteristic parameters as a basis for calculating the expansion  
of loading and filter ranges. Sbor.nauch.rab. po prov.sviazi no.2:  
105-119 '53. (MLRA 7:5)  
(Electric filters)

BELETSKIY, A.F.

Dissertation by A.F.Beletskii "Examining problems of calculations for some classes of linear electrical circuits according to given frequency characteristics." Izv.AN SSSR Otd.tekh.nauk no.5:791-792 My '53. (MLRA 6:8)  
(Electric circuits) (Beletskii, A.F.)

PHASE I BOOK EXPLOITATION SOV/3586

Beletskiy, Aleksandr Fedorovich

Teoreticheskiye osnovy elektroprovodnoy svyazi. Ch. III: Sintez reaktivnykh chetyrekhpolynusnikov i elektricheskikh fil'trov (Theoretical Principles of Wire Communication. Pt. 3: Synthesis of Reactive Four-Terminal Networks and Electric Filters) Moscow, Svyaz'izdat, 1959. 390 p. Errata slip inserted. 6,250 copies printed.

Resp. Ed.: N N. Garnovskiy; Ed.: N.N. Luzhetskii; Tech. Ed.: S.F. Karabilova.

**PURPOSE:** This book is intended for engineers and scientists engaged in the design of communication systems with frequency division of channels and may also be used for term and thesis projects in higher communications schools.

**COVERAGE:** The author discusses the theoretical principles of reactive four-terminal networks and methods of their synthesis according to predetermined frequency-response requirements. Special empha-

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## Theoretical Principles (Cont.)

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sis is placed on recent methods of synthesizing electrical filters according to their operating and image parameters. Methods of synthesizing some new types of reactive four-terminal networks are also analyzed. The author thanks Ya.A. Sobenin, Candidate of Technical Sciences. There are no references.

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Ch. 6. Synthesis of Particular Types of Electrical Filters and Reactive Four-Terminal Networks According to Their Operating Parameters

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AVAILABLE: Library of Congress

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JP/jb  
6-9-60

BELETSKIY, A.F.

Amplitude difference method for shaping a single-band signal.  
Elektrosviaz' 18 no.10:17-24 0 '64. (MIRA 17:12)

6,9000

67380

AUTHOR: Beletskiy, A.F.

SOV/106-59-9-8/13

TITLE: A Filterless Method of Analysis of Stationary Random Processes

PERIODICAL: Elektrosvyaz', 1959, Nr 9, pp 60-65 (USSR)

ABSTRACT: Existing methods of analysis of the spectra of random processes and the design of the corresponding spectrum analysers are based on the division of the spectrum of the analysed process into a number of frequency bands. This division is realised by a filter bank or "comb". From the values of the powers at the filter outputs, averaged over a period of time, the spectral density of average power of the analysed process can be found. Similar analysers can be used for measurement of "flowing" spectra. In this case, the voltages at the filter outputs are squared and averaged, and low-frequency filters are used to separate the low-frequency part of the squared voltages. Amongst the possible methods of approximation to  $S(f)$  is the method of least squares, in so far as identification of the spectrum with one of the existing samples means finding the minimum of the mean square deviation. For this

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SOV/106- 59-9-8/13

A Filterless Method of Analysis of Stationary Random Processes method, it is convenient to present  $S(f)$  as a finite Fourier sum  $S_n(f)$  which approximates to a presented function with minimum mean square error. It is important to note that with transformation of the frequency scale by use of a single-valued, uniformly-increasing function  $a = a(f)$ , the dependence  $S(f)$  can be represented approximately by a functional frequency scale. Then

$$S(a) = S(f) \frac{df}{da} \quad (1)$$

and a change of  $a(f)$  is equivalent to a change of the "weight" of the approximation. The author describes apparatus which will "model" the performance of  $S(a)$  as a finite Fourier sum. Spectra with negligibly small average power in the frequency band  $0 \leq f \leq f_0$  are analysed. If the function  $a = a(f)$  changes between  $0 \leq a \leq \pi$ , over the frequency band  $0 \leq f \leq f_0$ , then for an even function

$$S_n(a) = \frac{A_0}{2} + \sum_{k=1}^n A_k \cos ka, \quad (2)$$

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SOV/106-59-9-8/13

## A Filterless Method of Analysis of Stationary Random Processes

where

$$A_k = \frac{2}{\pi} \int_0^{\pi} S(a) \cos ka \, da. \quad (3)$$

As  $n$  increases the absolute error between  $S(a)$  and  $S_n(a)$  tends to zero. To determine the sum (Eq 2), the values of its coefficients (Eq 3) must be measured. To "model" the latter, it is necessary to multiply  $S(a)$  by  $\cos ka$  with subsequent integration. The multiplication operation can be realised by use of harmonic correctors (Ref 1), and the integration operation can be fulfilled by any of the well-known methods. Block diagram (Fig 1) illustrates the principle of operation. The characteristic phase of the phase circuit increases from  $a = 0$  to  $a = \pi$  over the frequency band  $0 \leq f \leq f_0$ . The process to be analysed is applied to the input of the phase circuit. The voltages at the input and the output of the circuit are summated and are fed to some apparatus (integrator) which measures its mean square value (mean power). The author then assumes that an harmonic oscillation with complex amplitude  $U_0$

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3/4

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SOV/106-59-9-8/13

## A Filterless Method of Analysis of Stationary Random Processes

is applied to the input to the phase circuit and derives an expression for the integrator reading  $W_k$  (Eq 5), which he compares with Eq (3), giving

$$W_k = A_0 + A_k, \quad (6)$$

The block schematic of the whole apparatus for determining the values of  $(n+1)$  coefficients is shown in Fig 2. The author then analyses spectra with negligibly small mean power in the frequency band  $f_{-1} \leq f \leq f_1$  (Eqs 7, 8 and 9) and describes the additional equipment necessary to obtain the values of the coefficients  $B_k$ . The indication of the integrator now gives

$$W_{ks} = A_0 - B_k. \quad (11)$$

Finally the author describes how the auto-correlation function can be calculated. There are 5 figures and 2 references, of which 1 is Soviet and 1 English.

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Synthesis of electric filters with linear phase characteristics.  
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