

BOKOR, Zsuzsa, dr.; TAMASI, Karoly, dr.

Asymptomatic hemochromatosis. Orv.hetil. 101 no.7:247-249
F '60.

1. Pecsí Orvostudományi Egyetem. I. sz. Belklinika.
(HEMOCHROMATOSIS case reports)

BOKOR, Zsuzsa, dr.; BOHENSZKY, György, dr.; HUBER, Sándor, dr.

Preludin intoxication. Orv. hetil. 101 no.20:706-707 15 My '60.

1. Pécsi Orvostudományi Egyetem, I. sz. Belklinika.
(PHENMETRAZINE toxicol.)

PATAKFALVI, Albert, dr.; BOKOR Zsuzsa, dr.; SEBESTYEN Janos, dr.

Evaluation of bucarban therapy. Orv.hetil. 101 no.30:1055-1057
24 JI '60.

1. Pecsí Orvostudományi Egyetem, I. sz. Belklinika és Szemklinika
(CARBUTAMIDE ther)

BOHENSZKY, Gyorgy, dr.; CSERMELY, Ferenc, dr.; BOKOR, Zsuzsa, dr.;
PATAKFALVI, Albert, dr.

Clinical features of pulmonary embolism and infarction. Orv. hetil.
102 no.27:1260-1263 2 Je '61.

1. Pecsı Orvostudományi Egyetem, I Belklinika.

(PULMONARY EMBOLISM statist)
(LUNG DISEASES statist)

BOHENSZKY, Gyorgy, dr.; BOKOR, Zsuzsa, dr.; CSERMELY, Ferenc, dr.

Rheosolon therapy of rheumatic fever. Orv. hetil. 103 no.19:887-888
13 My '62.

1. Pecs Orvostudományi Egyetem, I. Belklinika.
(RHEUMATIC FEVER ther) (PHENYL BUTAZONE ther)
(PREDNISOLONE ther)

BOHENSZKY, Gyorgy, dr.; EPER, Tivadar, dr.; BOKOR, Zsuzsa, dr.

Electromyography. Orv. hetil. 103 no.26:1227-1231 1 J1 '62.

1. Pecsí Orvostudományi Egyetem, I. Belklinika.
(ELECTROMYOGRAPHY)

SEBESTYEN, Janos; PATAKFALVI, Albert; BOKOR, Zsuzsa

Ophthalmological experience with buocarbon therapy. Szemeszet. 99
no.3:150-155 s 162.

1. A pecti Orvostudományi Egyetem Szemklinikájának (Igazgató: Boros,
Bela, as orvostudományok kandidátusa) es I. sz. Belklinikájának (Igazgató:
Barta Imre, as orvostudományok doktora) közleménye.
(CARBUTAMIDE ther) (EYE pharmacol)

HUNGARY

BOHENSZKY, Gyorgy, Dr, BOKOR, Zsuzsa, Dr, KUSTOS, Gyula, Dr, KISS, Kornelia, Dr; Medical, University of Pecs, I. Medical Clinic (Pecsi Orvostudományi Egyetem, I. Belklinika).

"The Significance of Phonocardiograms Obtained from a Lead Through the Esophagus."

Budapest, Orvosi Hetilap, Vol 104, No 18, 5 May 63, pages 829-831.

Abstract: [Authors' Hungarian summary] The authors discuss the performance of the Bohenszky-Edelenyi esophageal microphone probe. The sound effects obtained from the dorsal surface of the heart are valuable in the diagnosis of mitral abnormalities. 5 Western, 3 Eastern European references.

1/1

BOHENSZKY, Gyorgy, dr.; BOKOR, Zsuzsa, dr.; ROZSA, Elvira, dr.

Auricular electrokymography. Orv. hetil. 104 no.21:981-984, 21
My '63.

1. Pecsí Orvostudományi Egyetem, I. Belklinika.
(ELECTROKYMOGRAPHY) (MITRAL STENOSIS) (MITRAL INSUFFICIENCY)
(HEART SEPTUM, ATRIAL) (HEART DEFECTS, CONGENITAL)

BOHENSZKY, Gyorgy, dr.; BOKOR, Zsuzsa, dr.; KUSTOS, Gyula, dr.; KISS,
Kornelia, dr.

On the significance of phonocardiograms taken from the esophagus.
Orv. hetil. 104 no.18:829-831 5 My '63.

1. Pecsí Orvostudományi Egyetem, I. Belklinika.
(PHONOCARDIOGRAPHY) (ESOPHAGUS) (MITRAL STENOSIS)
(MITRAL INSUFFICIENCY)

BOHENSZKY, Gyorgy, dr.; BOKOR, Zsuzsa, dr.; ROZSA, Elvira, dr.

Electrokymographic examination of movements of the contours of the heart and large vessels in hemodynamic disorders caused by a shunt. Magy. radiol. 16 no.2:93-96 Ap'64

1. Pecsí Orvostudományi Egyetem I. sz. Belklinika közleménye.

*

BORDE, Zsuzsa, dr.; BOHNSZKY, György, dr.; TÖRÖ, Magdolna, Sn.

On the diagnostic value of pharmacophonocardiography. *Orv. Hetil.* 106 no.12:539-541. No 21 '65

I. Pécsi Orvostudományi Egyetem, I. Belklinikai (igazgató: Barta, Imre, dr.)

Cardiology

HUNGARY

OSZEPYI, Ferenc, Dr, PCHENSZKY, Gyorgy, Dr, BOKOR, Zsuzsa, Dr; Medical University of Pecs, I. Medical Clinic (director: BARTA, Imre, Dr) (Pecsi Crvostulomanyi Egyetem, I. Belklinika).

"Respiratory Function and Cardiological Studies in Patients Suffering From Pulmonary Heart Disease."

Budapest, Crvosi Hetilap, Vol 107, No 39, 25 Sep 66, pages 1835-1837.

Abstract: [Authors' Hungarian summary] Spirometric, blood gas analytical, EKG and electrokymographic studies were carried out on 37 patients suffering from cor pulmonale. The following conclusions were reached. 1) Spirometric studies do not furnish sufficient information for the classification of cor pulmonale into stages. 2) The O_2 concentration of the blood and its pCO_2 values are an accurate reflection of the clinical condition. 3) A close correlation can be demonstrated between the heart damage indicated by EKG and the clinical picture, on one hand, and the values of blood gas analysis, on the other hand. 4) Help is furnished by the wave anomalies observed with electrokymography for the recognition of chronic cor pulmonale and for the evaluation of its severity. 4 Eastern European, 10 Western references.

1/1

HUNGARY/Human and Animal Physiology. Internal Secretions.

Abs Jour: Ref Zhur-Biol., No 8, 1958, 36676.

Author : Bokori, J.

Inst :

Title : Congenital Goiter in Piglets.

Orig Pub: Magyar allatozv. Capja, 1956, 11, No 10-12, 364-369.

Abstract: No abstract.

Card : 1/1

83

HUNGARY / Diseases of Farm Animals. Diseases Caused by R
Bacteria and Fungi.

Abs Jour: Ref Zhur-Biol., No 8, 1958, 35806.

Abstract: on the next day. On the third day of fever good results were obtained with Novarsenol (14.5 grams in 50 milligrams of distilled water) in the therapy of two horses. Two horses which were inoculated with a strain of L. hyos, did not show any other symptoms (except some rise in temperature) and did not require treatment. Ten foals sick with leptospirosis (L. pomona) each received six to ten milligrams of (I) intramuscularly (1,440,000 to 2,400,000 units). Four foals of this group with acute jaundice received a repeated dose of (I). Results of the treatment: eight foals recovered, the two with acute jaundice, however, remained quite sick. Thus, at a late stage of the disease, when jaundice is present, (I) does not ensure positive results.

Card 2/2

6

HUNGARY

KEMENES, F., BOKORI, J., KARSAI, F., SURJAN, J.; Institute of Epizootiology (Director: MANNINGER, R., professor) and Clinic of Internal Diseases (Director: MOCSI, J., professor) of the Veterinary College and "Phylaxia" State Serum Institute (Director: MOLNAR, J.) [Hungarian version not given], Budapest.

"Leptospira Canicola-Induced Abortion in Swine in Hungary."

Budapest, Acta Veterinaria Academiae Scientiarum Hungaricae, Vol 12, No 3, 1962, pp 235-248.

Abstract: [English article; Authors' English summary] Abortions in a group of sows in advanced stages of pregnancy on a collective farm were found to have been caused by *Leptospira canicola*. Levaditi's method revealed the presence of these pathogenic agents in the fetal organs. It was also isolated from the urine of one of the aborting sows. Epidemiological and extensive serological evidence showed the farm to be exclusively infected with *L. canicola*. The finding seems to bear out the authors' inference from experi-

1/2

BOKORI, Jozsef, dr., egyetemi adjunktus

Data on fowl gout.I. Magy allatorv lap 17 no.7:247-251
Jl '62.

1. Allatorvostudományi Főiskola Belgyógyászati Tanszék
és Klinika. Tanszékvezető: Horváth Zoltán dr., egyetemi
docens, az allatorvostudományok kandidátusa.

KEMENES, F.; BOKORI, J.; KARSAI, F.; SURJAN, J.

Leptospira canicola-induced abortion in swine in Hungary.
Acta veter Hung 12 no. 3:235-248 '62.

1. Institute of Epizootiology (Director: Prof. R. Manninger)
and Clinic of Internal Diseases (Director: Prof. J. Moczy)
of the Veterinary College and "Phylaxia" State Serum
Institute (Director: J. Molnar), Budapest.

HUNGARY

BOKORI, Jozsef, Dr, adjunctus; Veterinary Medical University, Medical Department and Clinic (chairman: HORVATH, Zoltan, Dr, docent, candidate of veterinary medicine) (Allatorvostudományi Egyetem Belgyógyászati Tanszék és Klinika).

"Gout of the Fowl."

Budapest, Magyar Allatorvosok Lapja, Vol 5, No 18, May 63, pp 214-217.

Abstract: A historical survey is presented on the research conducted on the gout of fowl. The theories and experiments dealing with the problem are described in detail. Various nutritional factors, diseases of the kidneys and genetic inclination are mentioned in the etiology of the disease. A differentiation is made between gout of the joints and gout of the viscera, the latter being attributed to kidney damage. The clinical symptoms are presented both for the acute and for the chronic forms of the disease. Pathological findings in the internal organs, kidneys, ureters and joints are described in detail. No references.

1/1

HUNGARY

EOKORI, Jozsef, Dr, BOLDIZSAR, Harrison, Dr, university adjunctuses, KUTAS, Ferenc, Dr, assistant professor (tanarseged); University of Veterinary Medicine, Medical Department and Clinic (Allatorvostudományi Egyetem Belgyógyászati Tanszék és Klinika) (chairman: HORVATH, Janos, Dr, docent, candidate of veterinary sciences) and Department of Physiology (Elettani Tanszék) (chairman: KEMENY, Armand, Dr, professor, candidate of veterinary sciences).

"Investigation of the Physical Properties and Chemical Composition of Fowl Urine."

Budapest, Magyar Allatorvosok Lapja, Vol 18, No 8, Aug 1963, pages 327-330.

Abstract: [Authors' English summary modified] The urine of 30 healthy leg-horn hens has been tested by the authors. The physical properties of urine, taken from the ureter, are described. The chemical composition, mainly electrolytes, have been determined. Of the fixed cations K, Na, Ca, and Mg have been tested. Sodium and potassium were found in largest quantities, their proportion was found to be in relation with the K/Na ratio of the food ingested. Considerable amounts of ammonia were also found. The chloride concentration was proportional to the sodium content in most of the cases. Phosphate and urea excretions were proportional to the protein intake. No direct correlation was found between the urea content and pH of the urine. The results are evaluated with respect to renal regulation of the fowl's metabolism by the authors. 19 Western, 5 Eastern European references.

1/1

BOLIVAS, J.; BOLIVASAR, H.; KUTAS, F.

On the physical properties and chemical composition of the urine of poultry. Acta vet. Acad. sci. Hung. 15 no.109-11 169

1. Department of Internal Medicine and the Clinics (Head: Prof. Z. Horvath), University of Veterinary Sciences, Budapest.

BOKORI, J.

Quantitative data on several blood constituents, blood pH and the uric acid content of certain organs in healthy chickens. Acta vet. Acad. Sci. Hung. 15 no.3:307-316 '65.

Nutritional gout in chickens. Pt. 1. Ibid.:349-370

1. Department and Clinic of Internal Medicine (Head: Prof. Z. Horvath) of the University of Veterinary Sciences, Budapest.

BOKORI, J.

Studies on nutritional gout in poultry. Part 2. Acta vet. acad. sci. Hung. 15 no.4:421-440 '65.

1. Department and Clinic of Internal Diseases (Director: Prof. Z. Horvath), University of Veterinary Sciences, Budapest.
Submitted February 12, 1965.

HUNGARY

EOKORI, J.; University of Veterinary Sciences, Department of Medicine (director: HORVATH, Z.) (Allatorvostudományi Egyetem, Belgyógyászati Osztály), Budapest.

"Gout in Poultry III. Production of Gout by Chemical Damage to the Kidneys."

Budapest, Acta Veterinaria Academiae Scientiarum Hungaricae, Vol XVI, No 3, 1966, pages 273-286.

Abstract: [English article, author's English summary modified] Potassium dichromate, calomel and sodium bicarbonate were given to different groups of poultry. Autopsy revealed renal gout in some cases, visceral gout of varying severity in all cases and articular gout in the third group. In the first group, very high uric acid and NPN levels were found in the plasma while the rise was insignificant in the other two groups. The correlations found between the character of renal changes, plasma UA and NPN levels and the severity of urate deposits have shed some light on the pathogenesis of avian gout. In acute, generalized renal degeneration there is a sudden rise in UA and NPN levels to excessive peaks; in subacute renal lesion this rise is gradual and more moderate; in chronic nephritis there is no significant rise. It is thought that the behavior of UA and NPN levels can be explained in terms of the severity of epithelial damage. 5 Eastern European, 14 Western references. [Manuscript received 5 Oct 65.]

1/1

HUNGARY

BOKORY, Jozsef, Dr., Associate Professor, Candidate of Veterinary Sciences, Chair and Clinic for Internal Medicine at the University for Veterinary Sciences (Allatorvostudományi Egység Belgyógyászati Tanszék és Klinikája)[location not given](Head: HORVATH, Zoltan, Dr., Professor, Candidate of Veterinary Sciences).

"On Poultry Gout. Part 4: Experimental Feeding to Induce Avitaminosis A and Gout"

Budapest, Magyar Allatorvosok Lapja, Vol 21, No 5, May 1966, pp 211-216.

Abstract: Feeding a diet deficient in vitamin A, gout was induced in young and adult poultry. In most instances the gout manifested itself in the kidney. Most animals lost weight; some exhibited loss of egg-yolk color, deterioration of blood plasma, anemia, and clouding of the cornea. Some specimens showed signs of gout in the intestines and joints. It was established that the uric acid and residual-nitrogen content of the blood plasma is not a reliable means of diagnosing gout. 26 references, including 10 German, 3 Russian, 12 Hungarian, and 1 Western.

1/1

BOKOTey, I.I.

USSR/General and Special Zoology - Insects.

P-6

Abs Jour : Ref Zhur - Biol., No 5, 1958, 20874

Author : Bokotey, I.I.

Inst :

Title : Data on the Fauna of Sawflies and Horntails (Chalastogastra, Hymenoptera) in the Transcarpathian Region.

Orig Pub : Nauchn. zap. Uzhgorodsk. un-ta, 1956, 16, 119-132

Abstract : A fauna list, including 132 species, of which 15 were designated as pests in agriculture and forestry.

Card 1/1

Bokotey, I. I.

USSR / General and Special Zoology. Insects. System- P
atics and Faunistics.

Abs Jour: Ref Zhur-Biol., No 21, 1958, 96407.

Author : Bokotey, I. I.

Inst : Uzhgorod University.

Title : Symphyta Hymenopterous Insects and their Distri-
bution in the Transcarpathian Region.

Orig Pub: Nauchn. zap. Uzhgorodsk. un-ta, 1956, 21, 155-
165.

Abstract: A list of 263 species. Their distribution ac-
cording to landscape zones and their adaption
to ecotopos.

Card 1/1

Country : USSR P-5
CATEGORY :
ABS. JOUR. : RZBiol., No. 19, 1958, No. 47898
AUTHOR : Bokotey, I. I.
INST. : Uzhgorod University
TITLE : Some Data Concerning Harmful Saw-Flies and
Horntails of Transcarpathia.
ORIG. PUB. : Dokl. i soobshch. Uzhgorodsk. un-ta, 1957,
No 1, 48-50
ABSTRACT : In Transcarpathia have been found 114 species
of horntails and saw-flies, about 20 of which cause ap-
preciable damage. A brief characterization is given of the
economically important species.

CARD:

BOKOTey, I.I.

Vertical distribution of sawflies (Hymenoptera, Chalcididae)
in the Rovna mountain massif, transcarpathia. Nauk. zap. UzhGU
40:221-226 '59. (MIRA 14:4)

1. Uzhgorodskiy gosudarstvennyy universitet.
(Transcarpathia--Sawflies)

BOKOTI, I.I.

A new species of sawflies of the genus *Ametastegia* A. Costa
(Hymenoptera, Tenthredinidae) from Transcarpathia. Ent. obozr.
41 no.3:625-626 '62. (MIRA 15:10)

1. Kafedra zoologii Uzhgorodskogo gosudarstvennogo universiteta,
Uzhgorod.

(Transcarpathia—Sawflies)

FEDOTOV, P.G.; YEVTIKHIN, P.I. [deceased]; LYASHKO, I.F., inzhener, retsenzent; BOKOV, A.I., retsenzent; MESMELOV, V.A., retsenzent; KABANOV, N.Ya., redaktor; POPOLOV, Ya.N., redaktor izdatel'stva; UVAROVA, A.F., tekhnicheskii redaktor

[Technical standardization of duplicating and photocopying work]
Tekhnicheskoe normirovanie kopiroval'nykh i svetokopiroval'nykh
rabot. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry,
1956. 86 p. (MLRA 9:10)
(Copying processes)

BOKOV, A. N.

Journal of the American
Ceramic Society
Vol. 47 No. 5
May 1, 1954
Cements, Limes, and Plasters.

Repeat

② mat

Cement plant with automatic process. (Yu. S. Lur'm and A. N. Bokov. *Tsement*, 19 [6] 4-8 (1953).—Methods of making all operations of a cement plant automatic are proposed for consideration by the industry. The entire technological process is broken down into unit operations of (1) grinding, (2) storage and adjustment of slurry, (3) preparation of coal and firing, and (4) grinding of clinker, packaging, and storage. The proposals cannot be carried out without the design of new grinders, pumps, and feeders not now in existence in the Soviet Union. Flow sheets are included.
B.Z.K.

RUDCHENKO, A.V., prof.; BOKOV, A.N., dotsent; VARFOLOMEYEVA, A.G., assistant;
BELOKON', A.N., dotsent; GORGAINOVA, Ye.F.; DANILOVA, V.I.

Industrial hygiene in the production of lead batteries. Report
No.2. Sbor. trud. Kursk. gos. med. inst. no.13:15-22 '58.

(MIRA 14:3)

1. Iz kafedry gigiyeny (zav. - prof. A.V.Rudchenko), obshchey khimii
(zav. - dotsent A.N.Belokon') Kurskogo gosudarstvennogo meditsinskogo
instituta i Kurskoy oblastnoy sanitarno-epidemiologicheskoy stantsii
(glavnyy vrach - V.I.Latanov).

(LEAD-POISONING)

(INDUSTRIAL HYGIENE)

CHUYKO, A.V., kand. tekhn. nauk; BOKOV, A.N., kand. med. nauk

Sanitary engineering requirements for structural plastics.
Stroi. mat. 10 no.10:5-7 0 '64.

(MIRA 18:2)

BOKOV, A.S., inzh.

Improvement of transport and combustion of Bashkirian coal.
Energetik 11 no.8:35-38 Ag '63. (MIRA 16:10)

SHAPIRO, G.A., inzh.; BOKOV, A.S., inzh.

Operating mode of a turbine using a generator in the capacity
of a synchronous compensator. Elek. sta. 34 no.10:38-41 0 '63.
(MIRA 16:12)

BOKOV, A.S., inzh.; ZHADAN, N.Ya.; inzh.; PANKRATOV, G.M., inzh.

Gas drying of fuel with high-moisture content using fan mills
in TP-170 boilers. Energetik 12 no.7:9-10 J1 '64.

(MIRA 17:9)

BOKOV, A.S., inzh.; ZHADAN, N.Ya., inzh.; PANKRATOV, G.M., inzh.; USHAKOV,
S.G., inzh.

Burning of Bashkirian coal in ejector burners with gas drying.
Elek. sta. 35 no.6:11-15 Je '64. (MIRA 18:1)

BOKOV, B., inzh.gidrotekhniki

Protect water reservoirs from pollution. IUn.tekh. 4 no.7:
9-10 J1 '60. (MIRA 1):9)
(Water--Pollution)

BOKOV, B., mayor

Determination of the geographical coordinates of a point by means
of a plotting scale. Voen. vest. 41 no.5:91-94 My '61. (MIRA 14:8)
(Artillery--Problems, Exercises, etc.)

BOKOV, B.

Inside the big belt. Znan. sila 35 no. 12:26-29 D '60.

(MIRA 13:12)

(Moscow--City planning) (Moscow--Traffic engineering)

BOKOV, Grigoriy Alekseyevich; DMITRIYEVA, Raisa Stepanovna; KHOKHLOVA, R.A., red.izd-va; FOMICHEV, P.M., tekhn.red.

[Collection of resolutions of congresses of representatives of consumers' cooperative societies of the U.S.S.R., meetings of the council and the administrative board of the Central Union for the Maintenance of Cooperative Property] Sbornik postanovlenii i rezolutsii upolnomochennykh potrebitel'skoi kooperatsii SSSR, sobranii soveta i pravleniia Tsentrosoiuza o sokhrannosti kooperativnoi sobstvennosti. Moskva, Izd-vo Tsentrosoiuza, 1959. 205 p. (MIRA 13:4)

(Cooperative societies)

BOKOV, G.I.
BOKOV, G.I., (Chkalov)

Rate of formation of conditioned defense responses to electric
irritation in pigeons. Zhur. vys. nerv. deiat. 5 no. 3:420-425 My-Je
'55. (MLRA 8:10)

(REFLEX, CONDITIONED, response
defense reflex to electricity in pigeons)

BOKOV, G. I.

20-2-61/62

AUTHOR
TITLE

BOKOV G.I.

Haemolytic Properties of Organ and Tissue Metabolites
obtained under Conditions of short-lived Tissue Culture.
(Gemoliticheskiye svoystva organo - tkanevykh metabolitov,
poluchennykh v usloviyakh kratkovremennoy kul'tury tkaney.
Russian)

PERIODICAL

Doklady Akademii Nauk SSSR 1957 Vol 115 Nr 2, pp 418-420
(USSR)

ABSTRACT

In connection with the problem of chemical properties and the places of formation of non-immune haemolysins in the organism the author investigated the haemolytic characteristics of the metabolites of 8 organs and 4 kinds of animals. They were produced according to the method of L.S.SHTERN. The investigation showed the following results: the metabolites of rabbit cat white rat and guinea pigs have haemolytic activity to a smaller or greater extent. This property is strongest in the organs of white rats and rabbits. Spleen metabolites do not range first with of all kinds of animals investigated. Their activity however surpasses that of all other organs. Striking in the case of all animals were the high activity of the muscular organs (heart and skeleton musculature) as well as the lacking activity of fatty metabolites of cats and guinea pigs.

CARD 1/3

20-2-51/62

Haemolytic Properties of Organ and Tissue Metabolites
obtained under Conditions of short-lived Tissue Culture.

There are no characteristics of these metabolites specific for a certain type; they also haemolyze erythrocytes of other animals, although a little less intensively. The non immune haemolysins are apparently normal physiological factors of the metabolism of tissue and not products of the autolysis of tissue, as was sometimes maintained. The finding of these haemolytic factors in the culture media of most of the investigated organs (heart, lungs, liver, kidney, spleen, skeleton, muscles, brain, fatty bodies) indicates the probability of assumption that their formation is not only restricted to their organs of the reticulo-endothelial system but is to a certain extent, also characteristic of the other organs of the body. The specific haemolytic activity calculated for 1 g of the organ deviates from that of the spleen only slightly. The thermal lability of the haemolytic factors of the organ-tissue metabolites, the s-shaped course of the curve of haemolysis under the influence of these factors as well as the temperature characteristics of their influence prove the assumption of I.I. MECHNIKOV and of a number of other researchers of the fermentative nature of non-immune metabolites.
(1 Illustration, 2 Tables and 6 Slavic references)

CARD 2/3

20-2-61/62
Haemolytic Properties of Organ and Tissue Metabolites
obtained under Conditions of short-lived Tissue Culture.

ASSOCIATION: Physiologic Laboratory of the Academy of Sciences and
~~Chkalov~~ Pedagogic Institute.
(Fiziologicheskaya laboratoriya Akademii nauk SSSR)
(Chkalovskiy pedagogicheskiy institut.- Russian)
PRESENTED BY: L.S. Shtern, member of the Academy, April 16, 1957
SUBMITTED: 15.4.57
AVAILABLE: Library of Congress.

CARD 3/3

BOKOV, G. I., Cand Biol Sci -- (diss) "Hemolytic properties of organo-tissue metabolites under the conditions of normalcy and after hypoxia." Orenburg, 1960. 15 pp; (Academy of Medical Sciences USSR, Inst of Normal and Pathological Physiology); 200 copies; price not given; (KL, 22-60, 134)

BOKOV, I.A. (Gor'kiy)

Deriving formulas for the transformation of a sum of two trigonometrical functions into a product. Mat. v shkole no.5:46 S-0 '58.
(MIRA 11:10)

(Trigonometrical functions)

BOKOV, I. I.

BOKOV, I. I.: "The problem of the steel-melting reduction of a chrome-phosphorus furnace charge." Acad Sci Kazakh SSR. Inst of Metallurgy and Ore Dressing. Alma-Ata, 1956. (Dissertation for the Degree of Candidate in Technical Sciences).

Source: Knizhnaya letopis' No. 28 1956 Moscow

SOV/137-58-9-18442

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 36 (USSR)

AUTHORS: Bokov, I. I., Lyudogovskiy, G. I.

TITLE: Behavior of Chromium and Phosphorus in the Oxidizing Smelting of Iron-chromium-phosphorus Alloys (Povedeniye khroma i fosfora pri okislitel'noy plavke zhelezo-khromo-fosforistykh splavov)

PERIODICAL: Izv. AN KazSSR. Ser. gorn. dela, metallurgii, str-va i stroymaterialov, 1957, Nr 5 (16), pp 112-115

ABSTRACT: The behavior of Cr and P contained in iron in various ratios during oxidizing smelting was studied under laboratory conditions. Three alloys containing 0.88%-6.84% Cr and 2.42-6.0% P and having Cr: P ratios of 1:1 and 1:3 were investigated. The smeltings were carried out in Nr 5 corundum crucibles with 100-g samples of alloy in a furnace with a graphite heater. Chemically pure Fe_2O_3 was used in the role of oxidizer. The amount of the latter necessary for the complete oxidation of the impurities was taken as 100%. Experiments were carried out at 1400 - 1500°C with additions of 20, 50, 100, 150, and 200% of the theoretical amount of oxidizer. Upon reaching the given temperature, the

Card 1/2

SOV/137-58-9-18442

Behavior of Chromium and Phosphorus (cont.)

mass was held for thirty minutes; then the metal and the slag were rapidly cooled and analyzed chemically. It is established that in alloys with high [Cr] and [P] the oxidation of impurities proceeds in the same order as during the oxidizing smelting of alloys with low [Cr] and [P]. Si, C, and Mn of the alloy oxidize first; Cr and P oxidize last. The order and the degree of the oxidation of impurities do not change even in the case when alloys containing more [P] than [Cr] are subjected to oxidizing smelting. The better oxidizability of P at a lower temperature is verified. An increase in the amount of the oxidizer lowers the effect of temperature on the degree of oxidation of P. The content of Fe in the slag (calculated as FeO) constitutes from 60 - 90%, that of Cr oxides from 6 to 34%, that of the oxides of P up to 8%. The petrographic investigation of the slags established in them a high content of chromspinelides with a larger amount of Fe oxides than that required for the formation of chromite ($\text{FeO} \cdot \text{Cr}_2\text{O}_3$).

Ye. K.

1. Chromium-iron-phosphorus alloys--Melting 2. Chromium--Chemical reactions
3. Phosphorus--Chemical reactions 4. Metals--Oxidation 5. Metals--Test results
Card 2/2

BOKOV, I.I.; LYUDOGOVSKIY, G.I.

Certain characteristics of melts in the system iron phosphate -
chromium oxide. Izv.AN Kazakh.SSR.Ser.met., obog.i ogneup.
no.2:71-76 '58. (MIRA 16:2)
(Systems (Chemistry)) (Fused salts)

BOKOV, I.I.

Recrystallization of low-carbon steel deoxidized by various
amounts of aluminum. [Sbor. trud.] Nauch.-issled. inst. met.
no.4:91-95 '61. (MIRA 15:11)

(Rolling (Metalwork))
(Crystallization)

S/133/62/000/007/008/014
AO54/A127

AUTHORS: Smirnov, Yu.D.; Bokov, I.I.

TITLE: At the Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii
(Chelyabinsk Scientific Research Institute of Metallurgy)

PERIODICAL: Stal', no. 7, 1962, 621

TEXT: Tests were carried out to determine the effects of the phosphorus content and the smelting technology applied by various metallurgical plants on the quality of cables produced at the Beloretskiy metallurgicheskiy kombinat (Beloretsk Metallurgical Combine). A sulfur content of 0.007 - 0.045% and a phosphorus content of 0.012 - 0.026% did not affect the properties of the wire and service life of the cable. An increase of the phosphorus content of the steel to 0.042% reduced the wear resistance of the wire and the service life of the cable by 30 - 40%. The rupture of wires during drawing is caused by surface defects, axial porosity, combined with liquation and local heating.

Card 1/1

KOPYRIN, I.A.; RANNEV, G.G.; SMIRNOV, Yu.D.; CHERNOV, G.I.;
BOGATENKOV, V.F.; BOKOV, I.I.; TSIPUNOV, A.G.; RISFEL', K.N.;
AGARKOVA, N.A.; DAYKER, A.L.

Research by the Chelyabinsk Metallurgical Research Institute.
Stal' 22 no.7:604,620-621,667,670 J1 '62. (MIRA 15:7)
(Metallurgical research)

BOKOV, I.I., kand.tekhn.nauk; SHUB, L.G., inzh.

Effect of ironing passes in rolling on the properties of low-carbon steel
sheet. Stal' 23 no.4:340-343 Ap '63. (MIRA 16:4)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.
(Rolling (Metalwork)) (Sheet steel)

BOKOV, I.I.; PYKHOV, E.V.; ZINOV'YEV, A.F.; MEL'MAN, R.P.

Wear testing machine for wire. Zav. lab. 30 no.6x755 '64
(MIRA 17:8)

1. Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.

DEDINETS, Ye.P.; BOKOV, I.V., tekhnicheskiy inspektor

~~XXXXXXXXXXXXXXXXXXXX~~
"Manual for handling explosives" by S.F. Vaskovskii. Reviewed by
E.P. Dedinets, I.V. Bokov. Bezop.truda v prom. 2 no.9:36-37 S '58.
(MIRA 11:9)

1.Zaveduyushchiy sektorom otдела truda Vsesoyuznogo tsentral'nogo
soveta profsoyuzov.
(Explosives)

I. 15774-63

Pr-4/Pu-4 WW

EPF(c)/EWT(1)/EPP(n)-2/BDS

AFPTC/ASD/IJP(C)/SSD

ACCESSION NR: AP3006641

8/0286/63/003/008/0016/0016

AUTHOR: Bokov, K. K. 65

TITLE: Heat exchanger for cooling gases with high initial temperature. Class 17, No. 153923

SOURCE: Byul. izobreteniy i tovarny*kh znakov, no. 8, 1963, 16

TOPIC TAGS: heat exchanger, gas cooling, heat transfer, heat radiation, high initial temperature gas

ABSTRACT: The patent introduces a heat exchanger for cooling gases with high initial temperature. In order to intensify the cooling of the heat exchanger tubing on the side of the hot-gas supply, a baffle is placed in the space between the tubes, creating a second cooling circuit. In order to intensify the heat transfer by radiation, metal rods of varying cross section are inserted into the tubes located on the side of the cooled-gas discharge.

ASSOCIATION: none

SUBMITTED: 23Jan61

SUB CODE: PR

DATE ACQ: 30Sep63

NO REF SOV: 000

ENCL: 00

CTHER: 000

ITSKOVICH, G.M.; KISEL'EV, V.A.; CHERNAVSKIY, S.A.; BOKOV, K.N.; FAGEL',
A.Z.; BONCH-OSMOLOVSKIY, M.A.; GRINCHAR, G.N.; CHERNAVSKIY, S.A.,
kandidat tekhnicheskikh nauk, nauchnyy redaktor; TIKHONOV, A.Ya.,
tekhnicheskiy redaktor

[Collection of problems and methods of calculating machine parts]
Sbornik zadach i primerov rascheta detalei mashin. Moskva, Gos.
nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 267 p. (MIRA 10:4)
(Machinery--Design)

Bokov, K.N.

AUTHORS: Bokov, K.N., Itskovich, G.M., Kiselev, V.A.,
Chernavskiy, S.A. Call No. TF 230 .K3

TITLE: Undergraduate Course in Design of Machine Elements.
(Kursovoye proyektirovaniye detaley mashin) (Uchebno-
-spravochnoye posobiye)

PUB. DATA: Gosudarstvennoye nauchno-tekhnicheskoye izdatel'stvo
mashinostroitel'noy literatury, Moscow, 1957,
2d ed. rev., 503 pp., 25,000 copies

ORIG. AGENCY: None given

EDITORS: Ed of Publishing House: Krylov, V.I., Engr.; Science
Ed.: Itskovich, G.M., Engr.; Tech. Editors:
Tikhanov, A.Ya., and Sokolova, T.F.; Corrector:
Matisen, V.G.

PURPOSE: This book is approved by the Administration of
Special Secondary Educational Institutions, Ministry
of Higher Education of the USSR, as a text for technical
schools.

Card 1/10

Undergraduate Course in Design of Machine Elements. Call No. TF 230.K8 (Cont.)

COVERAGE: The book is stated to contain the basic data and instructions for designing the drive mechanisms which are the standard subjects of study in courses in machine design at USSR technical schools. Typical design problems and calculations are given. The authors stress the importance of conducting student examinations in basically the same way as that in which students defending theses are examined. Chapter XIV was written with the assistance of Bonch-Osmolovskiy, M.A., Candidate of Technical Sciences, and Grinchar, G.N., Candidate of Technical Sciences. There are 34 references, all USSR.

Card 2/10

BOKOV, K.N., inzh.; YELIZAROV, D.P., kand.tekhn.nauk

Experimental determination of mechanical stresses in steam pipes
in a heated condition. Elek.sta. 29 no.6:15-20 Je '58. (MIRA 11:9)
(Steampipes) (Strains and stresses)

ITSKOVICH, G.M.; KISELEV, V.A.; CHERNAVSKIY, S.A., kand.tekhn.nauk;
BOKOV, K.N.; PAGEL', A.Z.; BONCH-OSMOLOVSKIY, M.A.; GRINCHAR,
G.N.; KL'KIND, V.D., tekhn.red.

[Collected problems and exercises of design for the course on
machine parts] Sbornik zadach i primerov rascheta po kursu
detalei mashin. Izd.2-e, perer. Moskva, Gos.nauchno-tekhn.
izd-vo mashinostroit.lit-ry, 1959. 330 p. (MIRA 13:10)
(Mechanical engineering--Problems, exercises, etc.)

BOKOV, K.N.

PHASE I BOOK EXPLOITATION SOV/3453

Chernavskiy, Sergey Aleksandrovich, Georgiy Mikhaylovich Itskovich, Vyacheslav Aleksandrovich Kiselev, Kirill Nikolayevich Bokov, Mikhail Aleksandrovich Bonch-Osmolovskiy, and Boris Pavlovich Kozintsov

Proyektirovaniye mekhanicheskikh peredach; uchebno-spravochnoye posobiye po kursovomu proyektirovaniyu detaley mashin (Designing of Mechanical Drives; Text and Handbook On Machine Parts Designing) Moscow, Mashgiz, 1959. 740 p. 80,000 copies printed.

Scientific Ed.: S.A. Chernavskiy; Ed. of Publishing House: N.Yu. Blagosklonova, Engineer; Tech. Ed.: A.Ya. Tikhanov; Managing Ed. for Information Literature: I.M. Monastyrskiy, Engineer.

PURPOSE: This manual is intended for students in higher engineering schools.

COVERAGE: This book describes the basic principles of the kinematic design of drives with a consideration of economy
Card 1/8

Designing of Mechanical (Cont.)

SOV/3453

factors. Fundamentals of designing speed reducers, variable speed drives, and various types of mechanical transmission are explained. Methods of designing for strength are also discussed. Examples of design and construction of drives are presented. No personalities are mentioned. There are 67 Soviet references.

TABLE OF CONTENTS:

Foreword	3
Ch. I. Assignment for a Term Project on Machine Parts (K.N. Bokov, Engineer)	
1. The scope and content of the assignments	5
2. Examples of assignments	8
Ch. II. Making Drawings and Calculation Notes	33
3. Basic requirements for preparation of drawings (K.N. Bokov)	33
4. Preparation and the form of calculation notes (G.M. Itskovich, Engineer)	39

Card 2/8

BOKOV, Kirill Nikolayevich; ITSKOVICH, Georgiy Mikhaylovich, inzh.; KISELEV, Vyacheslav Aleksandrovich; CHERNAVSKIY, Sergey Aleksandrovich; GIL'DENBERG, M.I., red.izd-vs; MODEL', B.I., tekhn.red.

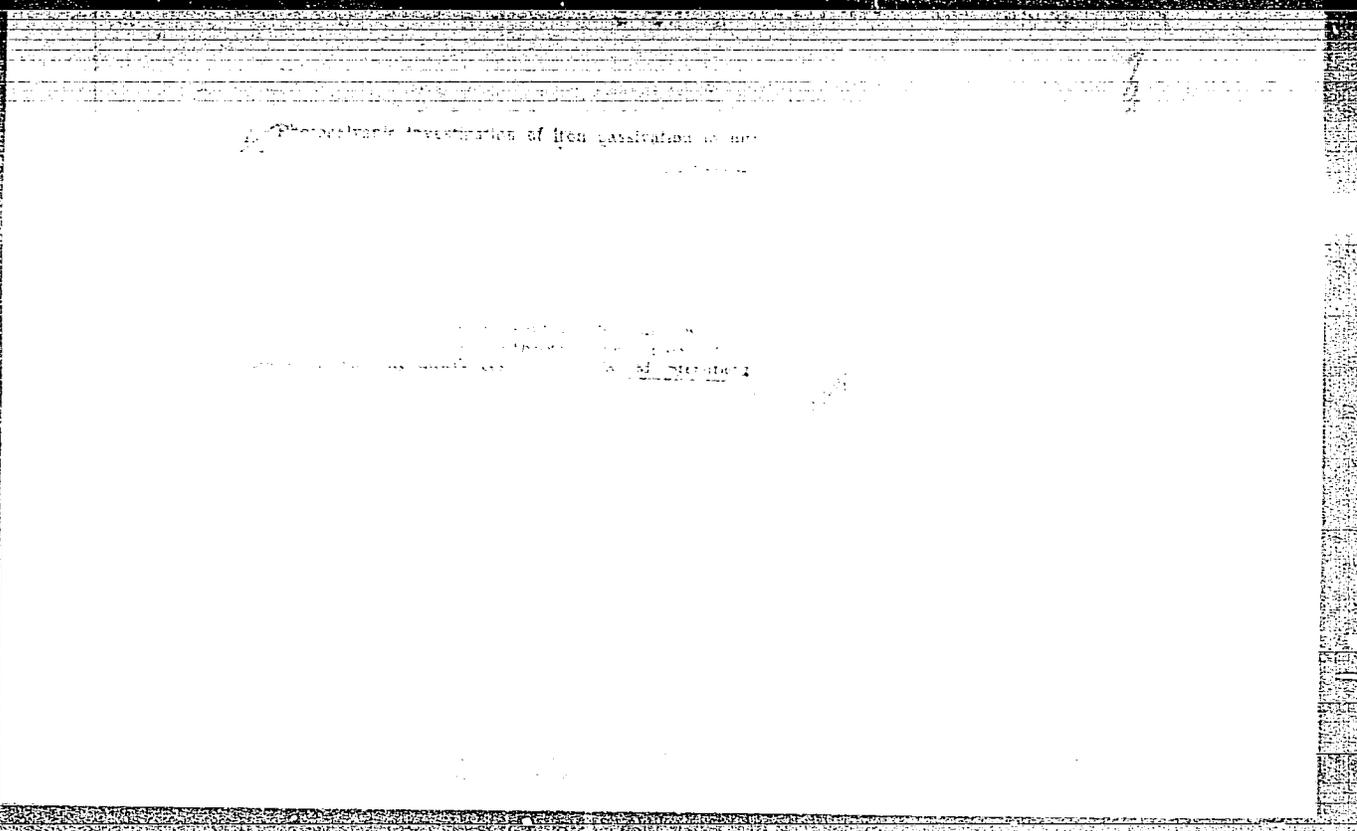
[Course in the design of machine parts; text and reference book]
Kursovoe proektirovanie detalei mashin; uchebno-spravochnoe posobie.
Izd.3. Leningrad, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry,
1960. 507 p. (MIRA 13:11)
(Machinery--Design)

CHERNAVSKIY, S.A., kand. tekhn.nauk; ITSKOVICH, G.M.; KISELEV, V.A.:
BOKOV, K.N.; BONCH-OSMOLOVSKIY, M.A.; KOZINTSOV, V.P.;
FEDOTOV, G.I., prof., retsenzent; GIL'DBERG, M.I., red.izd-
va; SOKOLOVA, T.F., tekhn. red.

[Design of mechanical transmissions] Proektirovanie mekhani-
cheskikh peredach; uchebno-spravochnoe posobie po kursovomu
proektirovaniu mekhanicheskikh peredach. Izd.2., perer.
[By] S.A.Chernavskii i dr. Moskva, Mashgiz, 1963. 799 p.

(MIRA 16:12)

(Power transmissions)



KUNAKOV, N.Ye., kandidat tekhnicheskikh nauk; BOKOV, M.I., retsenzent;
MALIKOV, K.V., retsenzent.

[Running automobiles on compressed coke gas] Rabota avtotransporta
na szhatom koksovom gaze. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry
po chernoi i tsvetnoi metallurgii, 1953. 123 p. (MLRA 7:5)
(Coke) (Gas and oil engines) (Automobiles)

BOKOV, N

BOKOV, N.

Boiling toilet soap bases consisting of fatty acids obtained by noncatalytic splitting. Masl.-zhir.prom. 17 no.8:31-32 Ag '52.
(MLRA 10:9)

1. Krasnodarskiy maslozhirkombinat.
(Oils and fats) (Acids, Fatty) (Soap)

1. БОКОВ., N. M.
2. USSR (600)
4. Soap
7. Chilling soap. Masl. zhir. prom. 17 no.9, 1952.

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

БОКОВ, Н. М.

Soap

Purification of dark cottonseed soap stocks at the soap factory of the Krasnodar Oil and Fat Combine. Masl. -zhir. prom. 18, No. 1, 1953.

Monthly List of Russian Accessions, Library of Congress
June 1953. UNCL.

BOKOV, N. M.


 The use of synthetic fatty acids for soap manufacture.
 M. Bokov (Fat-Oil Combine, Krasnodar). *Masloboino-*
Zhurnalya from. 21, No. 7, 18-20(1958).--The phys. char-
 acteristics of toilet and household soaps of 73 and 60% fatty
 acid content were affected but slightly by synthetic fatty
 acids in amts. and chain lengths as follows: 7-8% of C₁₂-C₁₄
 (I) or C₁₆-C₁₈ (II); up to 15% of C₁₂-C₁₄ (III) + I or II
 and 4-5% of II and III; whereas 40-47% soap contg. 4-5%
 of II and III or the 40% soap made entirely of I, II, or III
 would not congeal and remained soft and pasty.
 Vladimir N. Krukovsky.

BOKOV, N.M.

Improved method for the purification of sweet water. Masl.-zhir.prom.
22 no.4:22-24 '56. (MIRA 9:9)

1.Krasnodarskiy maslozhirkombinat.
(Glycerol)

Bokov, N. N.

AUTHOR: Bokov, N.N.

94-1-11/24

TITLE: V-Belt Drives Splicing (Sshivka klino-remennoy pereachi)

PERIODICAL: Promyshlennaya Energetika, 1958, No.1,
pp. 24 - 25 (USSR)

ABSTRACT: This brief note describes a method of jointing V-belts, that received a fifth premium in an All-Union competition on power economy. The method of cutting the belt, making holes in it, and sewing it with thongs, is fully described and illustrated with sketches. It is claimed that the joints are reliable.
There is 1 figure.

AVAILABLE: Library of Congress

Card 1/1

BOKOV, N. V.

"Means and Ways of Reducing Costs for the Contact Network of Electric Railroads,"
Official opponents: A. Ye. Kaplyanskiy, Professor, Doctor of Technical Sciences,
and V. A. Belyakov, Docent, Candidate of Technical Sciences.

Dissertation for the Degreee of Candidate of Technical Sciences, defended at Leningrad
Institute for Railroad Engineers im. Obratsov 1 July 1948. (Elektrichestvo, 1958,
Nr. 5, pp. 91-91)

TAMAROV, P.B., inzh.; BOKOV, R.G., inzh.; LIPKIN, Yu.P., inzh.

Making and sinking large-diameter reinforced concrete shells
in winter. Transp. stroi. 10 no. 12:19-22 D '60. (MIRA 13:12)
(Archangel--Bridges, Concrete)

ACC NR: AP7008886

SOURCE CODE: UR/0367/66/004/004/0850/0852

AUTHOR: Bokov, O. G.; Nguyen Van Kh'eu--Nguyen Van Hieu; Sredniava, B.--Sredniawa, B.

ORG: Joint Institute for Nuclear Research (Ob'yedinennyy institut yadernykh issledovaniy)

TITLE: Electromagnetic interactions of the X-meson in higher symmetries

SOURCE: Yadernaya fizika, v. 4, no. 4, 1966, 850-852

TOPIC TAGS: electromagnetic interaction, meson

SUB CODE: 20

ABSTRACT: Radiative decays of the ninth pseudoscalar meson X(960) are treated. Relations have been obtained between the coupling constants for single photon decays of the X-meson and the nonet of vector mesons and for the two - photon decays of the pseudoscalar meson nonet in the internally broken $O(12)$ -symmetry scheme. Relations between the probabilities of the various processes are calculated. Orig. art. has: 5 formulas. [Based on authors' Eng. abst.] [JPRS: 39,658]

Card 1/1

UDC: none

NEFEDOV, P.Ya.; CHERNOBROVKIN, V.P.; KATARIN, V.P.; ANAN'IN, A.A.;
BALBASHEV, V.K.; RYVKIN, I.Yu.; TSYNOVNIKOV, A.S.; KUZ'MIN, I.V.;
YAKOVLEV, S.Ye.; SHULAYEV, V.I.; MATSEVICH, S.I.; NARNITSKIY, A.P.;
BOKOV, O.K.; CHEREPANOV, V.Ye.

Coke briquets for cupola furnaces. Lit. proizv. no.3:6-7
Mr '65. (MIRA 18:6)

BOROV, V., dotsent

Improving the qualifications of engineers. NTO 3 no.11:31-33
N 161. (MIRA 14:10)

1. Vsesoyuznyy zaochnyy energeticheskiy institut.
(Technical education)

L 40936-66

ACC NR: AP6030987

SOURCE CODE: BU/0015/66/027/001/0001/0010

AUTHOR: Bokov, P.

12
B

ORG: Main Center for Geological Studies (Glavno upravl. za geol. prouchvaniya)

TITLE: Case of noncompensated settling in Northern Bulgaria and the feasibility of paleotectonic analysis

SOURCE: Bulgarsko geologichesko druzhestvo. Spisanie, v. 27, no. 1, 1966, 1-10

TOPIC TAGS: paleontology, tectonics ✓

ABSTRACT: The stratification of the Valangian, Berrias, and Tithonian layers in the depression of Lom and of the adjacent parts of the North Bulgarian plateau have been described and discussed. The depression represents a typical case of noncompensated negative tectonic movements with a sedimentary accumulation. The article concludes with an extended description of a new approach to the paleotectonic analysis of noncompensated tectonic events and discusses the formation and migration of hydrocarbons in noncompensated settling. Orig. art. has: 1 figure. [JPRS: 36,844]

SUB CODE: 08 / SUBM DATE: 26Jun64 / ORIG REF: 009 / SOV REF: 024
card 1/1 hs

BOKOV, V.A.

SUBJECT USSR / PHYSICS CARD 1 / 3 PA - 1382
AUTHOR BOKOV, W.A.
TITLE The Behavior of Seignette-Electric Solid Solutions in Strong
 Electric Fields.
PERIODICAL Žurn. techn. fis, 26, fasc 9, 1902-1911 (1956)
 Issued: 10 / 1956 reviewed: 10 / 1956

It is the purpose of this work to augment already existing knowledge concerning the behavior of solid solutions with seignette-electric properties in strong electric fields. For the characterization of these solutions the notions of the differential dielectric constant ϵ_d , the normal constant ϵ_n , and the "reversive" dielectric constant were introduced. They can be determined by the inclining and by the declining branch of the hysteresis curve. As the capacity of a condenser with a seignette-electric solution depends on voltage, the current will not be sinusoidal. Therefore, "full" compensation of the bridge is not possible and may only be attained for the first harmonic. We obtain a value for the linear capacity through which a current flows, the basic frequency of which is equal to that flowing through the nonlinear capacity with the same voltage. This capacity and the corresponding dielectric constant are called C_1 and ϵ_1 . In view of the fact, however, that C_1 does not determine the full resistance, the conception of effective capacity C_{eff} is introduced, which is:

$$\frac{I_{eff}}{\omega U_{eff}} .$$

Zurn.techn.fis, 26, fasc.9, 1902-1911 (1956) CARD 2 / 3

PA - 1382

The corresponding dielectric constant, which is of the greatest importance, is ϵ_{eff} . In the case of the application of seignette-electric solid solutions also ϵ_1 and the nonlinearity:

$$N = \frac{1}{\epsilon_1} \frac{d\epsilon_1}{dE}$$

as well as the coefficient of the nonlinear current distortions and the spectral composition of the latter are of great importance. In the case of the present work a method was employed which permitted the determination of all these quantities.

The sample was provided with a sinusoidal voltage with the frequency 70 c, and with the help of a wave analyzer of the type 455 D, made by MARCONI, the effective values of all those harmonics of the current were determined, the values of which amounted to more than 5% of that of the first harmonic. The samples were first burnt in the usual manner at 1350° C and finally burnt at from 1420° C to 1480° C. As initial products corresponding carbonates and oxides were used. The surface of the electrodes was 6 to 9 mm². The temperature was measured by means of a thermocouple copper-constantan with an accuracy of up to one degree. Examination extended to:

Ba (Ti_{0,95}, Sn_{0,05})₃ ; Ba (Ti_{0,9}, Sn_{0,1})₃ ; Ba (Ti_{0,9}, Zr_{0,1})₃ ;
 (Ba_{0,9}, Sr_{0,1}) TiO₃ ; (Ba_{0,8}, Sr_{0,2})TiO₃ and Ba(Ti_{0,8}, Zr_{0,2})₃.

Zurn.techn.fis, 26, fasc.9, 1902-1911 (1956) CARD 3 / 3

PA - 1382

Summary of results obtained:

- 1.) The coefficient of the nonlinear distortions of the current flowing through the seignette-electric condenser may even exceed 100% in a sufficiently strong field.
- 2.) In strong electric fields the temperature dependence of the dielectric constant decreases in the case of all investigated solid solutions.
- 3.) The shift of the maxima on the curves of the temperature dependence of the dielectric constant occurring in strong electric alternating fields is not the image of the point shifts of phase transitions.
- 4.) The greatest nonlinearity among the investigated solid solutions at room temperature was found in the case of the samples $Ba(Ti_{0,9}, Sn_{0,1})O_3$ and

$Ba(Ti_{0,9}, Zr_{0,1})O_3$.

INSTITUTION: Institute for Silicate Chemistry of the Academy of Science in the USSR, Leningrad.

AUTHOR: Bokov, V.A.

46-2-2/23

TITLE: Certain piezoelectric properties of polycrystalline solid solutions of $(\text{Ba}, \text{Sr})\text{TiO}_3$, $\text{Ba}(\text{Ti}, \text{Sn})\text{O}_3$ and $\text{Ba}(\text{Ti}, \text{Zr})\text{O}_3$.(Nekotoryye pyezoelektricheskiye svoystva polikrystallicheskikh tverdykh rastvorov $(\text{Ba}, \text{Sr})\text{TiO}_3$, $\text{Ba}(\text{TiSn})\text{O}_3$ i $\text{Ba}(\text{Ti}, \text{Zr})\text{O}_3$.)PERIODICAL: "Akusticheskiy Zhurnal" (Journal of Acoustics), 1957, Vol.3, No.2, pp. 104-108 (U.S.S.R.)

ABSTRACT: The investigation of the temperature dependence of resonant and anti-resonant frequencies of solid solutions of $(\text{Ba}, \text{Sr})\text{TiO}_3$, $\text{Ba}(\text{Ti}, \text{Sn})\text{O}_3$ and of $\text{Ba}(\text{Ti}, \text{Zr})\text{O}_3$ has been carried out by Smolenskiy et al. (1), (2), (3). Roy (4) has investigated the d_{33} piezoelectric constant of the above materials with respect to a constant polarising field voltage at room temperature. In the present article the author presents the results of his experimental evaluation of the dependence of the d_{31} piezoelectric constant and of the coefficient k of the electro-mechanical coupling of the above solutions on the polarising field voltage. Samples were synthesised in the usual manner, initially fired at 1 350 C, with final firing at 1 420 - 1 480 C. The basic materials were carbonates and

Card 1/4

46-2-2/23

Certain piezoelectric properties of polycrystalline solid solutions of $(\text{Ba,Sr})\text{TiO}_3$, $\text{Ba}(\text{Ti,Sn})\text{O}_3$ and $\text{Ba}(\text{Ti,Zr})\text{O}_3$. (Cont.)

bi-carbonates types "cha" and "chda". Measurements were made using disc form samples, 10 mm diameter, with fired-in silver electrodes. The resonant and anti-resonant frequencies of radial oscillations were determined using the method described by Mason (5), (6), the coefficient of electro-mechanical coupling and the piezoelectric constant d_{31} were determined from the formulae given by Mason (5), with the Poisson coefficient for all solutions taken as 0.27.

The moduli $|d_{31}|$ of solutions containing 5-10% of BaSnO_3 or BaZrO_3 have been found to exhibit one maximum against the varying field; the maximum has been found somewhat smaller than that of SrTiO_3 . It is thought that this is due to the effect of re-orientation of the lattice structure, as suggested by Roy (4), (7). For temperature dependent measurements - samples were first subjected to a 20 kV/cm field at room temperature. If the Curie point was below the room temperature, the sample, under 20 kV/cm, was cooled gradually down to the lowest measurement temperature and kept at it for one hour.

Card 2/4

46-2-2/23

Certain piezoelectric properties of polycrystalline solid solutions of $(\text{Ba}, \text{Sr})\text{TiO}_3$, $\text{Ba}(\text{Ti}, \text{Sn})\text{O}_3$ and $\text{Ba}(\text{Ti}, \text{Zr})\text{O}_3$. (Cont.)

Measurements were made by means of applying an instantaneous field of 1.5 kV/cm. It has been found that both the electro-mechanical k and the piezo-electric $|d_{31}|$ constants exhibit one maximum in the low-temperature phase transitions. In the orthorhombic and in rhombohedral phases k and $|d_{31}|$ increase with temperature and decrease in their tetragonal phase. With large enough polarising fields the modulus $|d_{31}|$ does not exhibit the maximum in the tetragonal phase. As suggested by Vul and Bogdanov and by Shuvalov and Zhelydev ("Results of measurements of piezoelectric constants of polarised ceramics" submitted at the first conference on "Seignette-electricity" in June, 1956) this is thought to be due to the re-orientation of the domains by 180° only.

Card 3/4

There are 5 graphs illustrating the obtained results and 9 references, 5 of which are Slavic.

ASSOCIATION: Institute of Semi-conductors Ac.Sc. U.S.S.R.,
Leningrad, (Institut Poluprovodnikov AN SSSR,
Leningrad)

46-2-2/23

Certain piezoelectric properties of polycrystalline solid solutions
of $(\text{Ba},\text{Sr})\text{TiO}_3$, $\text{Ba}(\text{Ti},\text{Sn})\text{O}_3$ and $\text{Ba}(\text{Ti},\text{Zr})\text{O}_3$. (Cont.)

SUBMITTED: December 17, 1956.

AVAILABLE: Library of Congress
Card 4/4

Bokov, V.A.

SUBJECT: USSR/Luminescence

48-3-13/26

AUTHOR: Bokov, V.A.

TITLE: Behavior of Some Ferroelectrics in Strong Electric Fields
(Povedeniye nekotorykh segnetoelektrikov v sil'nykh elektricheskikh polyakh)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya fizicheskaya, 1957, Vol 21, #3, pp 382-389 (USSR)

ABSTRACT: This paper is a continuation of investigations of the solid solutions $(\text{Ba},\text{Sr})\text{TiO}_3$, $\text{Ba}(\text{Ti},\text{Sn})\text{O}_3$ and $\text{Ba}(\text{Ti},\text{Zr})\text{O}_3$ which were carried out in the laboratory headed by G. Smolenskiy.

The following characteristics of these solid solutions were investigated: temperature-dependences of full polarization, coercive force and hysteresis losses during one cycle. These characteristics were determined from hysteresis loops obtained at a frequency of 50 c/p and an electric field intensity of 25 kv/cm.

Card 1/3

TITLE:

48-3-13/26

Behavior of Some Ferroelectrics in Strong Electric Fields
(Povedeniye nekotorykh segnetoelektrikov v sil'nykh elektricheskiykh polyakh)

Coercive force and hysteresis losses decrease in transitions from the tetragonal phase into orthorhombic one and from the orthorhombic phase into rhombohedral one; within each phase they increase with the lowering of temperatures. These results qualitatively agree with the Wieder (1) investigations and Devonshire (2) theory.

Full polarization increases in transitions from the tetragonal phase into orthorhombic one and from the latter into rhombohedral one.

In addition to hysteresis loops, the dependence of dielectric permittivity on electric field intensity at the room temperature and that on temperature at various intensities of electric field were determined. These dependences are presented graphically.

Non-linear properties of ferroelectrics are especially important for their use in dielectric amplifiers. Among the solid solutions investigated those containing 5 to 10 % of $BaSnO_3$ or

Card 2/3

TITLE:

48-3-13/26
Behavior of Some Ferroelectrics in Strong Electric Fields
(Povedeniye nekotorykh segnetoelektrikov v sil'nykh elek-
tricheskikh polyakh)

BaZrO₃ possess most clearly expressed non-linear properties,
which is explained by their low electric striction.

The article contains 10 figures. The bibliography lists 9
references, of which 5 are Slavic (Russian).

INSTITUTION: Institute of Semiconductors of the USSR Academy of Sciences

PRESENTED BY:

SUBMITTED: No date indicated

AVAILABLE: At the Library of Congress.

Card 3/3

Bokov, V. A.

AUTHOR Bokov, V.A. 57-8-19/36
TITLE On the Nature of High Dielectric Permeability of some
Solid Solutions with Seignette-Electrical Properties.
(K voprosu o prirode vysokoy dielektricheskoy pronitsayemosti
nekotorykh tverdykh rastvorov, obladayushchikh segneto-
elektricheskimi svoystvami.)
PERIODICAL Zhurnal Tekhn. Fiz., 1957, Vol. 27, Nr 8, pp.1784-1793
(USSR)
ABSTRACT The dependence of ϵ and $\text{tg } \delta$ on the temperature was in-
vestigated in weak electric fields of a number of solid
solutions: $(\text{Ba, Sr})\text{TiO}_3$, $\text{Ba}(\text{Ti, Sn})\text{O}_3$ and $\text{Ba}(\text{Ti, Zr})\text{O}_3$.
The author shows that the phase transitions of these solid
solutions approach one another if the content of second
component is increased, which leads to the removal of
tetragonal and orthorhombic phases. The highest values of ϵ
in a weak field within the range of the Curie point are
observed with those solid solutions which correspond with
the range of the approach of phase transitions in phase
diagrams. These high values are explained by the essential
orientation polarization. The character of the dependence
of $\text{tg } \delta$ on the temperature is explained by means of the
data present on the dependence of coercive force and
of domain movability on the temperature. The maxima of $\text{tg } \delta$

CARD 1/2

57-8-19/36

On the Nature of High Dielectric Permeability of some Solid Solutions with Seignette-Electrical Properties.

and the lack of abrupt changes of ϵ in the ranges of the phase transitions with low temperature are explained by the increase of the orientation polarization on the occasion of the transition from a more symmetrical phase to a less symmetrical one. The dependence of hysteresis losses during one cycle on the alternating-field voltage was investigated. In areas of not strong fields these losses are proportional to the voltage E^2 and in stronger fields they are a linear function of \sqrt{E} .

(With 10 illustrations, 1 table and 6 Slavic references)

ASSOCIATION: Leningrad Institute for Semiconductors AN USSR.
(Institut poluprovodnikov AN SSSR, Leningrad.)

SUBMITTED: January 9, 1957.

AVAILABLE: Library of Congress.

CARD 2/2

BOKOV, V.A., Cand Phys Math Sci -- (diss) "Study of certain
properties of ~~Seignette's salt~~ *ferroelectric solid* solutions (Ba, Sr) TiO₃, Ba
(Ti, Sn) O₃ and Ba (Ti, Zr) O₃." Mos, 1958, 11 pp (Acad
Sci USSR. Inst of Crystallography) 110 copies (Fl, 27-58, 101)

Bokov, V. A.

57-1-12/30

AUTHOR: Bokov, V. A.

TITLE: The Investigation of the Temperature Dependence of Total Polarization, Coercive Force and Hysteresis Losses of $(\text{Ba}, \text{Sr})\text{TiO}_3$ -, $\text{Ba}(\text{Ti}, \text{Sn})\text{O}_3$ - and $\text{Ba}(\text{Ti}, \text{Zr})\text{O}_3$ - Polycrystalline Solid Solutions. (Issledovaniye temperaturnoy zavisimosti polnoy polarizatsii, koertsitivnoy sily i poter' na sistemakh polikristalli cheskiikh tverdykh rastvorov $(\text{Ba}, \text{Sr})\text{TiO}_3$, $\text{Ba}(\text{Ti}, \text{Sn})\text{O}_3$ i $\text{Ba}(\text{Ti}, \text{Zr})\text{O}_3$.)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1958, Vol. 28, Nr 1, pp. 77-86 (USSR)

ABSTRACT: The determination of the magnitude was carried out according to hysteresis loops. For the registration of the latter an ordinary bridge scheme with an oscillograph was used. The investigations showed the following: 1.-In solid $\text{Ba}(\text{Ti}, \text{Sn})\text{O}_3$ and $\text{Ba}(\text{Ti}, \text{Zr})\text{O}_3$ solutions spontaneous polarization decreases with the decrease of the content of BaTiO_3 . 2.-In solid $(\text{Ba}, \text{Sr})\text{TiO}_3$ solutions spontaneous polarization decreases with the increase of the content of SrTiO_3 up to 40%. With a content of SrTiO_3 of more than 50% an essential increase of spontaneous polarization is observed. This coincides qualitatively with the results of ref. 1. 3.-Coercive force and hysteresis losses decrease with all solid solutions investigated at the transition from a more symmetric to a less symmetric phase. (From the tetragonal to the orthorhombic

Card 1/2

The Investigation of the Temperature Dependence of Total Polarization, 57-1-12/30
Coercive Force and Hysteresis Losses of $(\text{Ba}, \text{Sr})\text{TiO}_3$, $\text{Ba}(\text{Ti}, \text{Sr})\text{O}_3$ and
 $\text{Ba}(\text{Ti}, \text{Zr})\text{O}_3$ Polycrystalline Solid Solutions.

and from the orthorhombic to the rhomboedric phase). Within each phase both of them increase with temperature drop. The authors were advised by G. A. Smolenskiy, Doctor of Technical Science. There are 11 figures, 2 tables, and 8 references, 2 of which are Slavic.

ASSOCIATION: Institute for Semiconductors AS USSR, Leningrad
(Institut poluprovodnikov)

SUBMITTED: April 8, 1957

AVAILABLE: Library of Congress

Card 2/2

SOV/70-4-3-29/32

AUTHORS: Myl'nikova, I.Ye. and Bokov, V.A.

TITLE: Some Dielectric Properties of Single Crystals of $Pb_3NiNb_2O_9$

PERIODICAL: Kristallografiya, 1959, Vol 4, Nr 3, pp 453-454 (USSR)

ABSTRACT: Smolenskiy and Agramovskaya (Ref 1) prepared polycrystalline $Pb_3NiNb_2O_9$ and studied its dielectric properties, showing its susceptibility-temperature curve had a maximum. Single crystals have now been grown from a melt in PbO and were checked by X-ray powder photographs for composition. They were sliced into plates of unknown orientation and curves of ϵ and $\tan\delta$ were recorded at 1, 45 and 450 kc/s for temperatures between $-170^\circ C$ and 0° . The loss curves show pronounced maxima at about $-125^\circ C$, varying with frequency. The $\epsilon-T$ curves are identical above -90° but below this depend on frequency. At $41^\circ K$ there is no hysteresis even at 100 kV/cm but at -196° hysteresis is appreciable at 50 c.p.s. and 85 kV/cm [sic] - it is not possible to decide

Card1/2

SOV/70-4-3-29/32

Some Dielectric Properties of Single Crystals of $Pb_5NiNb_2O_9$

whether $Pb_5NiNb_2O_9$ is a ferroelectric or a "relaxator".

There are 2 figures and 1 Soviet reference.

ASSOCIATION: Institut poluprovodnikov AN SSSR (Institute of Semiconductors of the Ac.Sc., USSR)

SUBMITTED: August 19, 1958

Card 2/2