Dyeing of Polyacrylonitrile Fibers in the Presence of Monovalent Copper

S/183/60/000/003/008/016/XX
B004/B067

With rising concentration of copper and rongalite, the bound-copper content in the fiber increased. It amounted to $6.2 \cdot 10^{-5}$ moles/g (for 12.8% $CuSO_4$ referred to the weight of the fiber), and corresponded to the number of acid groups ($5 - 6 \cdot 10^{-5}$ equiv/g) of the fiber. Since the pH between 2 and 4.5 had no effect on the sorption of Cu and the dye, the following experiments were made at pH = 3.5. In one-bath dyeing, the amount of dye adsorbed was almost equivalent to the amount of copper adsorbed. In double-bath dyeing, less dye was adsorbed, probably as a result of the denser structure of the fiber dried after the first bath. Dyeing in the presence of bivalent copper (without addition of rongalite) showed the same quantitative results but duller color tints. Hence, the authors conclude that the following reactions take place: Cu^{2+} binds one molecule of dye with its second valence, Cu^{+}, however, binds the dye with its secondary valence. Although the dye contains two sulfo groups, one of them cannot react with the copper due to a static hindrance so that the maximum bond of the dye (Cu : dye) is 1 : 1, which corresponds to $6 \cdot 10^{-5}$ gram-equivalents of dye per gram of fiber. The authors give a short survey of the reducing agents, dyeing methods, and concepts of the reaction between copper ions and polyacrylonitrile fibers mentioned in Western

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Dyeing of Polyacrylonitrile Fibers in the Presence of Monovalent Copper

S/183/60/000/003/008/016/XX
B004/B067

publications. There are 4 tables and 12 references: 2 Soviet, 4 US, 1 French, and 5 German.

ASSOCIATION: Kalininskiy filial VNIIV (Kalinin Branch of the All-Union Scientific Research Institute of Synthetic Fibers)

Card 3/3

S/183/60/000/003/010/016/XX
B004/B067

AUTHORS: Zakharov, V. S., Zelentsov, I. G., and Pakshver, A. B.

TITLE: Diffusion of the Components of the Precipitating Bath Into the Viscose Fiber During Spinning

PERIODICAL: Khimicheskiye volokna, 1960, No. 3, pp 28-30

TEXT: The authors deal with the dependence of the spinning process of viscose fiber (coagulation, decomposition of the xanthogenate, desulfurization, etc.) on the rate of diffusion of the acid, the salts, and other components of the precipitating bath into the fiber. They attempted to find conditions under which a fiber of homogeneous structure is obtained. In this case, the difference between the rate of diffusion of the components of the precipitating bath and the saponification rate of the xanthogenate should be a minimum. The authors studied the effect of the composition of the precipitating bath on the diffusion rate under practical conditions. In order to interrupt the formation process rapidly, the fiber spun in an experimental apparatus was passed through a neutralizing bicarbonate salt solution which was at a distance of 15, 30, 45, 60, or 90 cm

Card 1/4

from the spinneret. The fiber was wound onto the godet wheel with a speed of 39 m/min. The thread diameter was 0.018 mm Proceeding from the equations $M_t/M_\infty = K\sqrt{\tau}$ (M_t = amount of the substance diffused into the fiber M_∞ = the same for the case of equilibrium, K = coefficient, τ = duration of diffusion in sec.) and $K = (4/r)\sqrt{D/\pi}$ (D = diffusion coefficient, r = radius of the fiber), D was experimentally determined. The following was found in dependence on the composition of the bath and its temperature:

Diffusion of the Components of the Precipitating Bath Into the Viscose Fiber During Spinning

S/183/60/000/003/010/016/XX
B004/B067

bath g/l			t, °C	$D.10^{-7}$
H_2SO_4	$ZnSO_4$	Na_2SO_4		
138	33	350	50	0,5
138	33	350	59	0,61
138	33	350	66	0,92
138	33	350	72	1,0
116	28	296	60	0,67
148	28	296	60	1,1
160	28	296	60	1,3
200	28	296	60	1,24
135	20	231	55	1,15
135	35	231	55	0,86
135	58	231	55	0,67
135	78	231	55	0,7
138	33	350	66	0,86
138	60	350	66	0,67
138	80	350	66	0,6
135	80	235—240	45	0,43
135	80	235—240	56	0,7
135	80	235—240	64	1,0
135	80	235—240	74	1,5

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Results: 1) The rate of formation of the viscose fiber depends on the concentration of the H^+, Zn^{2+}, and SO_4^{2-} ions in the precipitating bath, as well as on its temperature and the rate of diffusion of ions. 2) With rising temperature of the precipitating bath, the diffusion of ions into the fiber increases only to a certain value. A further increase in temperature does not accelerate diffusion. 3) Rising concentration of Zn^{2+} ions (up to 80 g/l of $ZnSO_4$) delays the decomposition of the xanthogenate. With $ZnSO_4$ concentrations above 80 g/l, however,

GELLER, A.A.; PAKSHVER, A.B.

Dyeing of polyacrylonitrile fiber in the presence of monovalent copper. Khim.volok. no.3:19-21 '60. (MIRA 13:7)

1. Kalininskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna.
(Dyes and dyeing--Textile fibers, Synthetic)
(Acrylonitrile)

ZAKHAROV, V.S.; ZELENTSOV, I.G.; PAKSHVER, A.B.

Diffusion of components in a precipitation bath deep into viscose fibers during their formation. Khim.volok. no.3: 28-30 '60. (MIRA 13:7)

1. Kalininskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna.
(Cellulose xanthate) (Rayon)

GELLER, A.A.; PAKSHVER, A.B.

Studying the process of dyeing polyacrylonitrile fiber. Report No.1. Khim.volok. no.6:15-17 '59. (MIRA 13:5)

1. Kalininskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna.
(Dyes and dyeing--Orlon)

KHURGINA, R.A.; PAKSHVER, A.B.

Complete analysis of viscose components. Khim.volok. no.6: 34-37 '59. (MIRA 13:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.
(Viscose)

PAKSHVER, A.B.

Synthetic fibers from polyacrylonitrile. Khim.volok. no.5:3-12 '59. (MIRA 13:4)

1. Kalininskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (VNIIV).
(Textile fibers, Synthetic) (Acrylonitrile)

ZAKHAROV, V.S.; ZELENTSOV, I.G.; PAKSHVER, A.B.

Studying the formation process of viscose cord fiber. Khim.volok. no.5:34-35 '59. (MIRA 13:4)

1. Kaliniskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (VNIIV).
(Rayon)

S/183/60/000/02/13/025
B004/B005

AUTHORS: Beder, N. M., Geller, B. E., Pakshver, A. B.

TITLE: On the Molecular Composition of Polyacrylonitrile

PERIODICAL: Khimicheskiye volokna, 1960, No. 2, pp. 33 - 36

TEXT: In the introduction, the authors give a survey of various methods of polymerising acrylonitrile (Refs. 1-15), and investigating the polymerisation degree (Refs. 16-18). It was the authors' intention to work out an accurate method of estimating the polymerisation degree of polyacrylonitrile (PAN). The separation of fractions by their molecular weight was carried out on the PAN dissolved in dimethyl formamide (DMF) by fractionated precipitation. Table 1 indicates the coagulation numbers of various reagents. Turpentine proved to be the most suitable precipitant. The solubility of turpentine in DMF increases sufficiently with rising temperature (Fig. 1) so that a fractionated precipitation becomes possible at 32°. An addition of oxalic acid facilitates the separation of fractions. The authors describe their procedure. The gelatinous precipitate is dissolved once more in DMF, and precipitated with water. 8-12 fractions of PAN were obtained, and their molecular weight was determined by measuring the specific viscosity of their

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0.25% solutions in DMF. Fig. 2 shows the results of this analysis. Table 2 indicates molecular weights of PAN obtained with various initiators including samples from Eastern Germany and the Rumanian People's Republic. Fig. 3 shows the division of a polymer into fractions of different viscosity. The PAN produced by continuous procedures showed the maximum homogeneity. There are 3 figures, 2 tables, and 19 references, 4 of which are Soviet.

ASSOCIATION: Kalininskiy filial VNIIV (Kalinin Branch of the All-Union Scientific Research Institute of Synthetic Fibers)

POKROVSKIY, L.I.; PAKSHVER, A.B.

Changes occurring in the molecular structure of capron fibers in thermal treatment. Izv. vys. ucheb. zav.; tekh. tekst. prom. no.5: 121-124 '59 (MIRA 13:3)

1. Ivanovskiy khimiko-tekhnologicheskiy institut i Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti.
(Nylon)

POKROVSKIY, L.I.; PAKSHVER, A.B.

Changes occurring in the molecular structure of capron fibers in thermal treatment. Izv. vys. ucheb. zav.; tekh. tekst. prom. no.5: 121-124 '59 (MIRA 13:3)

1. Ivanovskiy khimiko-tekhnologicheskiy institut i Vsesoyuznyy zaochnyy institut tekstil'noy i legkoy promyshlennosti.
(Nylon)

PAKSHVER, A. B.; FIKHMAN, V. D.

"Formovaniye polivinilatsetatnogo volokna po mokrom. sposobu."

report submitted for 35th Intl Cong, Industrial Chemistry, Warsaw, [illegible] Sep 64.

Vsesoyuznyy nauchno-issledovatel'skiy institut sinteticheskikh volokon, Moscow

S/183/59/000/06/004/027
B004/B007

15(4)
AUTHORS: Geller, A. A., Pakshver, A. B.

TITLE: Investigation of the Process of the Dying of Polyacrylonitril Fibers. 1. Report

PERIODICAL: Khimicheskiy volokna, 1959, Nr 6, pp 15-17 (USSR)

ABSTRACT: The authors point out the well-known difficulties connected with the colorability of polyacrylonitril-(PAN)-fibers, the causes of which have as yet not been investigated. They describe the determination of the diffusion coefficient of the coloring agent into the fiber. As coloring substances methylene blue and kislotnyy alyy prochnyy (acid blood red fast, an azo-dye) were used. As no data on the determination of the coloring substance absorbed by PAN-fiber are available in publications, the authors elaborated two methods. 1) Stripping of the coloring substance by means of a 50% aqueous solution of dimethyl-formamide until the complete decoloration of the fiber. 2) Dissolving the fiber in concentrated dimethyl formamide. In both cases the coloring substance content is determined by means of a photocolorimeter of the type FEK-M and a calibration curve. The authors give an equation for the cal-

Card 1/2

15(4), 5(2) S/183/59/000/06/010/027
AUTHORS: Khurgina, R. A., Pakshver, A. B. B004/B007

TITLE: A Complete Analysis of the Components of Viscose

PERIODICAL: Khimicheskiy volokna, 1959, Nr 6, pp 34-37 (USSR)

ABSTRACT: The authors mention the well-known methods of analyzing viscose (Refs 1-14) and its disadvantages (e.g. too complicated in practice, lack of accuracy). They checked several methods of determining sulfur- and sodium compounds and the γ-number. As a result of their investigations, the authors recommend the following method, in which determination of the individual components is carried out in separate samples. Production of two solutions: 1) Viscose solution. 2) Solution of by-products, obtained by salting out the xanthate with NaCl. The total content of sulfur is iodometrically determined in viscose and by-products after reduction by means of sodium zincate (Ref 15) to Na_2S. Na and S, bound in the xanthate, are determined according to the polymer method (Ref 17). The separate determination of Na_2S and sodium trithiocarbonate is carried out by means of gas analysis of the solution of the

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A Complete Analysis of the Components of Viscose S/183/59/000/06/010/027
B004/B0C7

by-products (Refs 2, 6) or by means of the titration with $K_3Fe(CN)_6$ worked out by the authors For the purpose of determining hyposulfite and polysulfide sulfur the well-known method of reference 22 is used For determining free NaOH and soda the authors developed a new method in an earlier paper (Ref 23). The results obtained by such analyses of viscose are given in a table. There are 1 table and 23 references, 13 of which are Soviet.

ASSOCIATION VNIIV- Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna
(All-Union Scientific Research Institute for Synthetic Fibers)

Card 2/2

SOV/58-59-7-15316

Translation from: Referativnyy Zhurnal Fizika, 1959, Nr 7, p 102 (USSR)

AUTHOR: Pakshver, A.B.

TITLE: Thermodynamic Method of Determining the Intermolecular Structure of Artificial and Synthetic Fibres

PERIODICAL: Tr Ivanovsk. khim. tekhnol. in-ta, 1958, Nr 8, pp 85 - 91

ABSTRACT: The article has not been reviewed

Card 1/1

SOV/81-59-10-37412

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 10, pp 570-571 (USSR)

AUTHORS: Bykov, A.N., Pakshver, A.B.

TITLE: The Total and Structural Viscosity of Concentrated Solutions of Polymers

PERIODICAL: Tr. Ivanovsk. khim. tekhnol. in-ta, 1958, Nr 8, pp 92-100

ABSTRACT: The structuralization in concentrated solutions of acetylcellulose in acetone and HCOOH, of the resin khlorin in dichloroethane and acetone, and of caprone in vitriol oil, 40% sulfuric acid and HCOOH has been investigated. The ratio: $K = (\eta_{spec}/C_{conc}/\eta_{spec}/C_{dil})$ (usual designations) has been taken as a characteristic of structuralization. It has been established that K for caprone changes little with concentration, but for acetylcellulose it increases strongly. The degree of structuralization depends on the concentration and the molecular weight of the polymer. The dependence of the viscosity on the rate of shear has also been investigated. Based on the obtained data the conclusion has been drawn, that at high shear stresses the flow of the solution is realized by partially destroyed associates of macromolecules. The viscosity of the solution depends on the ratio of the radius of the capillary to its length, decreasing with a decrease in

Card 1/2

The Total and Structural Viscosity of Concentrated Solutions of Polymers

this ratio. The viscosity of the concentrated solution determined with various viscosimeters can therefore have different values due to differences in the shear stresses and the degree of destruction of the solution structure.

Yu Lipatov

KONKIN, A.A.; BIRGER, G.Ye.; GRUZDEV, V.A.; PAKSHVER, A.B.; TSVETKOVA, N.F., red.; SHPAK, Ye.G., tekhn.red.

[Synthetic fibers] Khimicheskie volokna. Moskva, Gos.nauchno-tekhn.izd-vo khim.lit-ry, 1959. 50 p. (MIRA 13:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.
(Textile fibers, Synthetic)

FINGER, G.G.; PAKSHVER, A.B.; MOGILEVSKIY, Ye.M.

Accelerated methods for desulfurizing viscose silk in continuous process machines. Khim.volok. no.3:51-54 '59. (MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (VNIIV).
(Rayon spinning)

FILINKOVSKAYA, Ye.F.; PAKSHVER, A.B.

Change in the physicochemical properties of viscose silk under the influence of finishing agents. Khim.volok. no.4: 30-34 '59. (MIRA 13:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.

(Rayon)

KHURGINA, R.A.; PAKSHVER, A.B.

Rapid method for determining sulfide sulfur in by-products from viscose solutions. Khim.volok. no.3:35-36 '59.
(MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (VNIIV).
(Viscose) (Sulfur--Analysis)

KHURGINA, R.A.; PAKSHVER, A.B.

Methods for determining the amount of free sodium hydroxide and soda in viscose solutions. Khim.volok. no.3:37-39 '59.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (VNIIV).
(Viscose) (Sodium hydroxide) (Sodium carbonate)

KHURGINA, R.A.; PAKSHVER, A.B.

Separation determination of sodium sulfide and sodium trithiocarbonate in viscose solutions. Report No.2. Khim. volok. no.2:51-53 '59.
(MIRA 12:9)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.
(Viscose—Analysis)

FINGER, G.G.; PAKSHVER, A.B.; MOGILEVSKIY, Ye.M.

Effect of the structure of viscose fiber on the rate of the removal of sulfur from fiber. Izv. vys. ucheb. zav.; khim. i khim. 2 no.2:258-262 '59. (MIRA 12:9)

1.Vsesoyuznyy zaochnyy institut legkoy i tekstil'noy promyshlennosti i Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna. Kafedra tekhnologii voloknistykh materialov. (Rayon)

PAKSHVER, A.B.

5(3)

SOV/63-4-3-19/31

AUTHORS: Mogilevskiy, Ye.M., Candidate of Technical Sciences, Finger, G.G.

TITLE: Scientific-Technical Conferences and a Seminar on the Production and Processing of Chemical Fibers

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1959, Vol 4, Nr 3, pp 398-401 (USSR)

ABSTRACT: In November-December 1958 the All-Union Scientific-Technical Conference on Problems of the Application of Chemical Fibers in the Textile, knit goods and Haberdashery Industry took place with the participation of the VKhO imeni Mendeleyeva (All-Union Chemical Society imeni Mendeleyev). It was attended by 250 representatives of plants and scientific research institutes and scientists from China, Hungary, Poland and Czechoslovakia. The deputy of the president of the GNTK of the USSR N.A. Petrov pointed out that rational processing methods are necessary. A.N. Volkov (Upravleniye khimicheskikh volokon Goskomiteta Soveta Ministrov SSSR po khimii - Board of Chemical Fibers of the State Committee on Chemistry in the USSR Council of Ministers) presented a paper on the state and development of the production of chemical fibers in the USSR; Professor Z.A. Rogovin (Moskovskiy tekstil'nyy institut - Moscow Textile Institute)

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on technical methods of developing the production of chemical fibers; Professor A.B. Pakshver (VNIIV) on modern methods of studying the properties of chemical fibers; Candidate of Technical Sciences I.I. Pikovskiy (GNTK USSR) on: "The Production of Unwoven Materials From Artificial and Synthetic Fibers"; Professor V.Ye. Gusev (Moskovskiy tekstil'nyy institut - Moscow Textile Institute) on the basic principles of mixing natural fibers, especially wool, with chemical ones; N.Ya. Alekhin (GNTK USSR) on preparing staple yarn from fine viscose fiber; Professor V.A. Usenko (Moscow Textile Institute) on the effect of twisting staple yarn on its physical-chemical properties; A.G. Golod (Moninskiy kamvol'nyy kombinat - Moninsk Worsted Yarn Combine) on the experience of processing staple fibers in his plant; N.A. Orlov (VNIILtekmash), P.I. Aristov (IVNITI), Doctor of Technical Sciences A.N. Vanchikov (TsNIIKhBI) on the problems of designing and introducing new types of technological equipment. The Conference noted the backwardness in the development of efficient spinning, weaving and finishing equipment, the insufficient coordination of work and the lack of necessary laboratory equipment. On December 15-17, 1958, the All-Union Conference of Workers of the Industry of Chemical Fibers took pl...

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PAKSHVER, Aleksandr Bernardovich; MEOS, Aleksandr Ivanovich; GRUZDEV, V.A., retsenzent; SOKOLOVA, V.Ye., red.; LEVITSKAYA, N.N., tekhn.red.

[Technological calculations in the manufacture of synthetic fibers] Tekhnologicheskie raschety v proizvodstve khimicheskikh volokon. Moskva, Izd-vo nauchno-tekhn.lit-ry RSFSR, 1960. 346 p. (MIRA 14:4)
(Textile fibers, Synthetic)

PHASE I BOOK EXPLOITATION SOV/[illegible]7

Pakshver, Aleksandr Bernardovich, and Boris Emmanuilovich Geller

Khimiya i tekhnologiya proizvodstva volokna nitron (Chemistry and Technology of Nitron [Orlon] Fiber Production) Moscow, Goskhimizdat, 1960. 147 p. Errata slip inserted. 10,000 copies printed.

Ed.: S. I. Babushkina; Tech. Ed.: V. V. Kogan.

PURPOSE: This book is intended for engineer-technicians of the chemical fibers industry. It may also be used as a textbook for students of schools for higher education in chemistry and textiles.

COVERAGE: The book contains basic information on the production of acrylic fibers and polymers and copolymers of acrylonitrile. Methods developed by the Soviet chemical industry for producing orlon-type fibers are presented. The authors state that Soviet production of orlon-type polyacrylonitrile fibers will be thirty

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thousand tons in 1965. Chapters 1 - 4 and the supplements were written by B. E. Geller; Chapters 5 - 10 are by A. B. Pakshver. The authors thank T. M. Ivanova, A. A. Geller, V. I. Maksimov, and T. M. Kazachkova, personnel of the Branch of VNIIV (All-Union Scientific Research Institute for Fibers). References, mostly English and German, accompany individual chapters.

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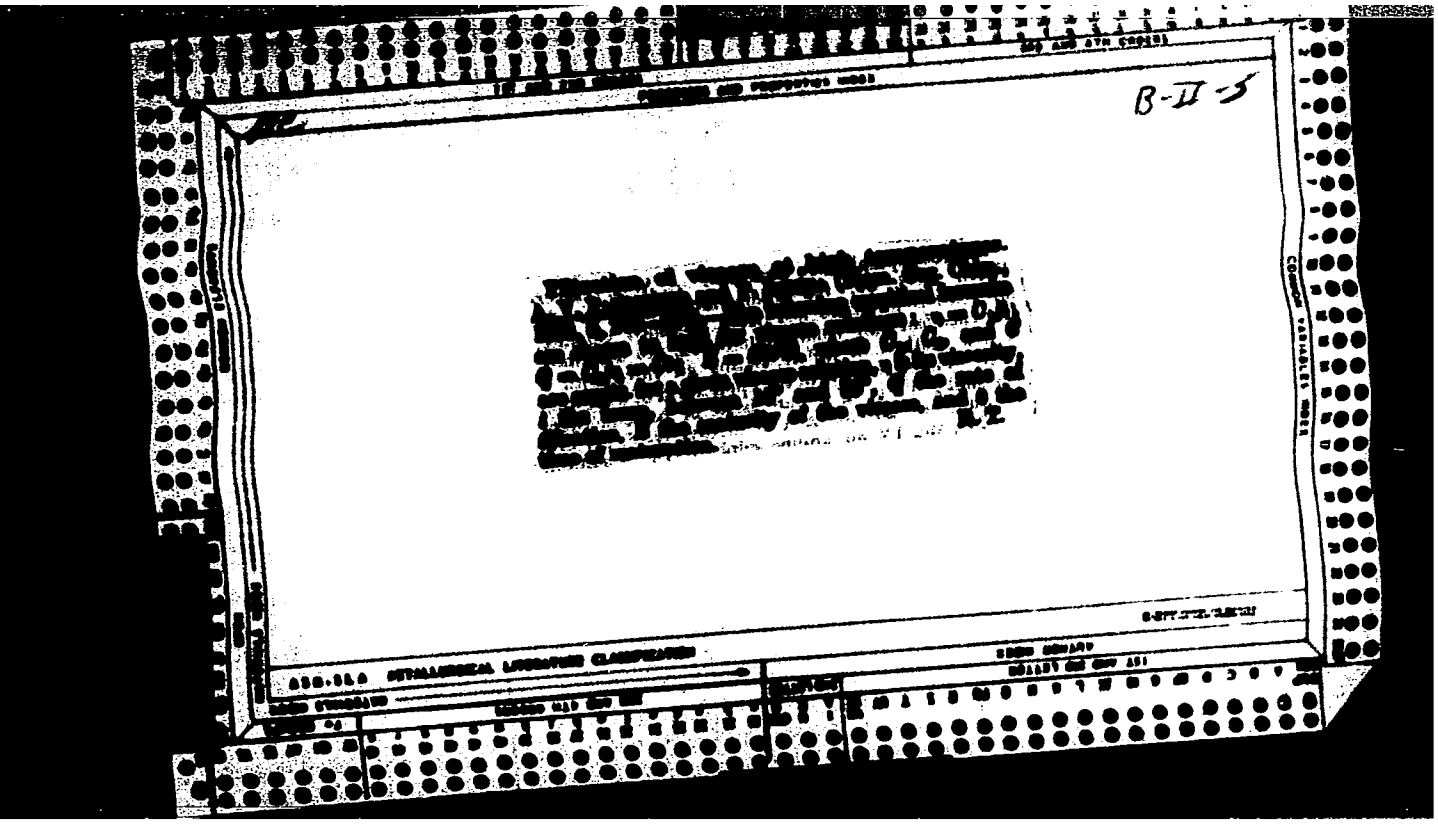
The effect of various treatments on the properties of viscose films A. P. Pakshver. *Org. Chem. Ind.* (U. S. S. R.) 5, 169-71(1938). The permeability of viscose films before and after treatments with concd. H_2SO_4 and 14% NaOH at 17° was studied. It was found that the diffusion rate of Et_2O, Me_2CO and water vapors through the treated films is comparatively reduced. This is explained by the resulting decreased capillarity (greater d.) of the film produced by the swelling effect of H_2SO_4 and NaOH. Other factors influencing the structure and permeability of viscose films are the tension in the process of film formation, thickness, micellar structure, etc. (cf. Pakshver and Mankash, *J. Phys. Chem.* U. S. S. R. in press). Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PAKSHVER, B.B., kand.tekhn.nauk

Some economic problems concerning the open and semi-open type of electric power plants in U.S.A. Energokhoz.za rub. no.1:6-11 Ja-F '60. (MIRA 13:5)
(United States--Electric power plants)

PAKSHVER, E.A.; IGNATOVA, A.I.; VINOGRADOV, G.V.

Temperature dependence of the viscosity of polymer solutions.
Vysokom. soed. 7 no.11:1964-1967 N '65. (MIRA 19:1)

1. Nauchno-issledovatel'skiy institut sinteticheskikh volokon
i Institut neftekhimicheskogo sinteza AN SSSR.

PAKSHVER, B.A.; BEKER, L.M.; GRISHINA, T.Ya.; KHARITONOVA, L.G.

Technological calculations for the machinery used in washing polyacrylonitrile fibers. Khim.volok. no.5:24-29 '59. (MIRA 13:4)

1. Kalininskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (VNIIV).
(Textile fibers, Synthetic) (Acrylonitrile)

MYAGKOV, V.A.; NIKONOVA, Ye.A.; PAKSHVER, E.A.

Structural properties of viscose and their effect on the quality of cord fiber. Khim. volok.no.5:35-39 '65. (MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy sinteticheskogo volokna.

GRISHINA, T.Ya.; PAKSHVER, E.A.; TSIPERMAN, V.L.

Studying the process of the spinning of polyacrylonitrile fibers. Khim. volok. no.3:9-10 '63. (MIRA 16:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.
(Textile fibers, Synthetic)
(Acrylonitrile)

PAKSHVER, E.A.; VINOGRADOV, G.V.; KONSTANTINOV, A.A.; FROLOVA, A.P.

Varying viscosity of viscose during the process of ripening prior to formation. Khim.volok. no.1:38-41 '63.
(MIRA 16:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut steklyanogo volokna (for Pakshver). 2. Institut neftekhimicheskogo sinteza AN SSSR (for Vinogradov, Konstantinov). 3. Kalininskiy kombinat iskusstvennogo volokna (for Frolova).
(Viscose) (Viscosumetry)

VINOGRADOV, G.V.; KONSTANTINOV, A.A.; PAKSHVER, E.A.; FROLOVA, A.P.

Study of viscose viscosity. Khim.volok. no.1:33-38 '63.
(MIRA 16:2)

1. Institut neftekhimicheskogo sinteza AN SSSR (for Vinogradov, Konstantinov). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut steklyanogo volokna (for Pakshver). 3. Kalininskiy kombinat iskusstvennogo volokna (for Frolova).
(Viscose) (Voscosity)

GRISHINA, T.Ya.; MICHURINA, G.A.; PAKSHVER, E.A.

Formation of polyacrylonitrile fibers. Khim.volok. no.4:
13-15 '59. (MIRA 13:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna i filial Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna v g. Kalinine.
(Orlon) (Acrylonitrile)

PAKSHVER, E.A.; VINOGRADOV, G.V.

Evaluating the polydispersity of viscose by its viscosity. Khim.-volok. no.2:25-29 '63. (MIRA 16:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut steklyanogo volokna (for Pakshver). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut neftesinteza AN SSSR (for Vinogradov).
(Viscose) (Viscosity)

PAKSHVER, E.A.; GELLER, B.E.; VINOGRADOV, G.V.

Studying the concentrated solutions of polyacrylonitrile in dimethylformamide. Khim. volok. no.2:21-24 '59. (MIRA 12:9)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.

(Acrylonitrile) (Formamide)

PAKSHVER, E.A.

Rheological (viscous)properties of viscose solutions.

Report presented at the 13th Conference on high-molecular compounds
Moscow, 8-11 Oct 62

USSR/Electricity
Electric Power
Diesel Engines

Nov 48

"Review of the Book, 'Diesel Power Plants,' by G. I. Rossiyevskiy, Candidate in Technical Sciences," V. B. Pakshver, Cand Tech Sci, 2 pp

"Za Ekon Top" No 11

Absence of adequate literature on subject makes book valuable, but too much space is given to accessory equipment. Problems of fuel economy are well but unequally covered. Among other defects, calculation of boiler-utilizers is too extensive,

57/49733

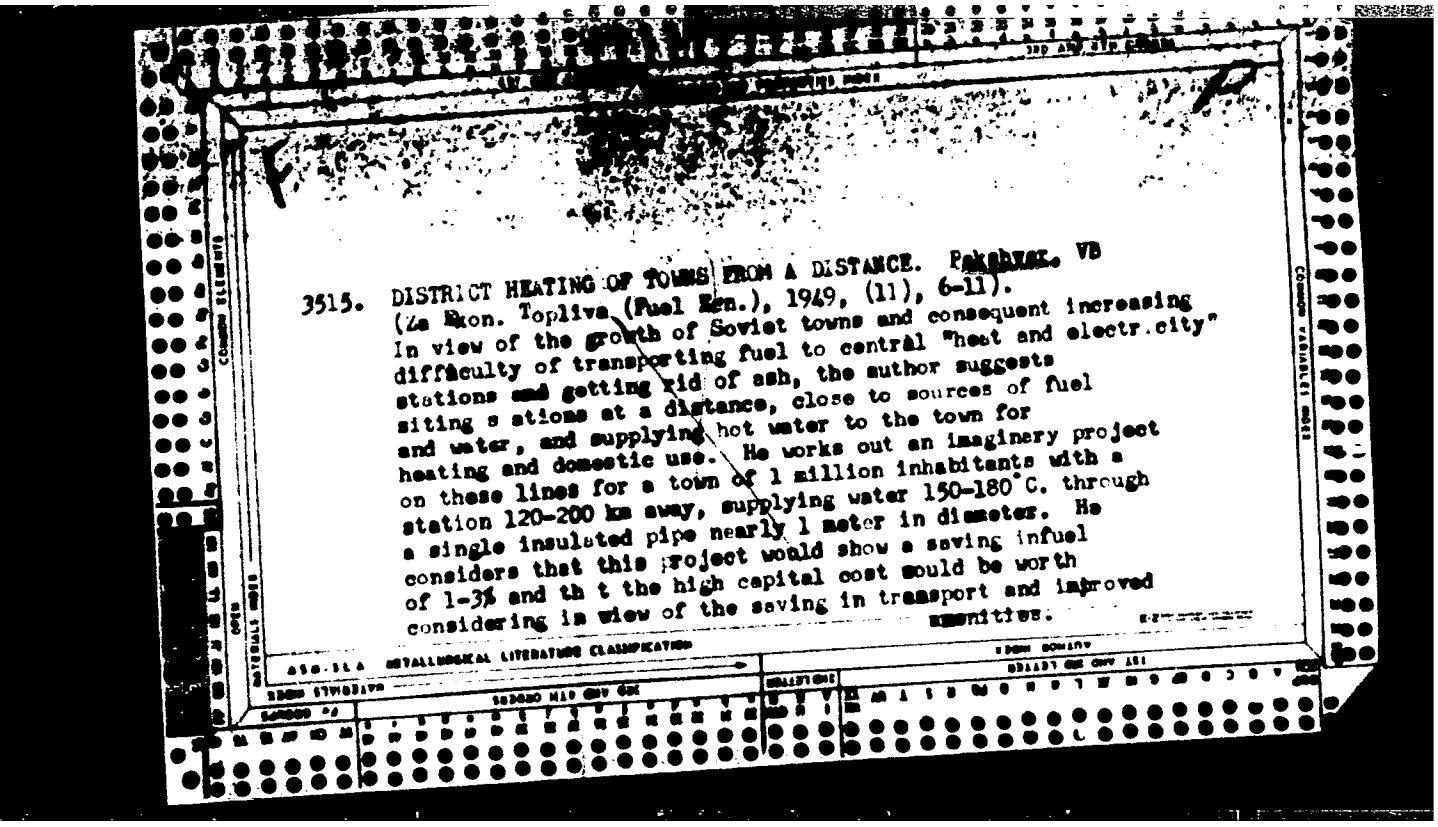
USSR/Electricity (Contd)

Nov 48

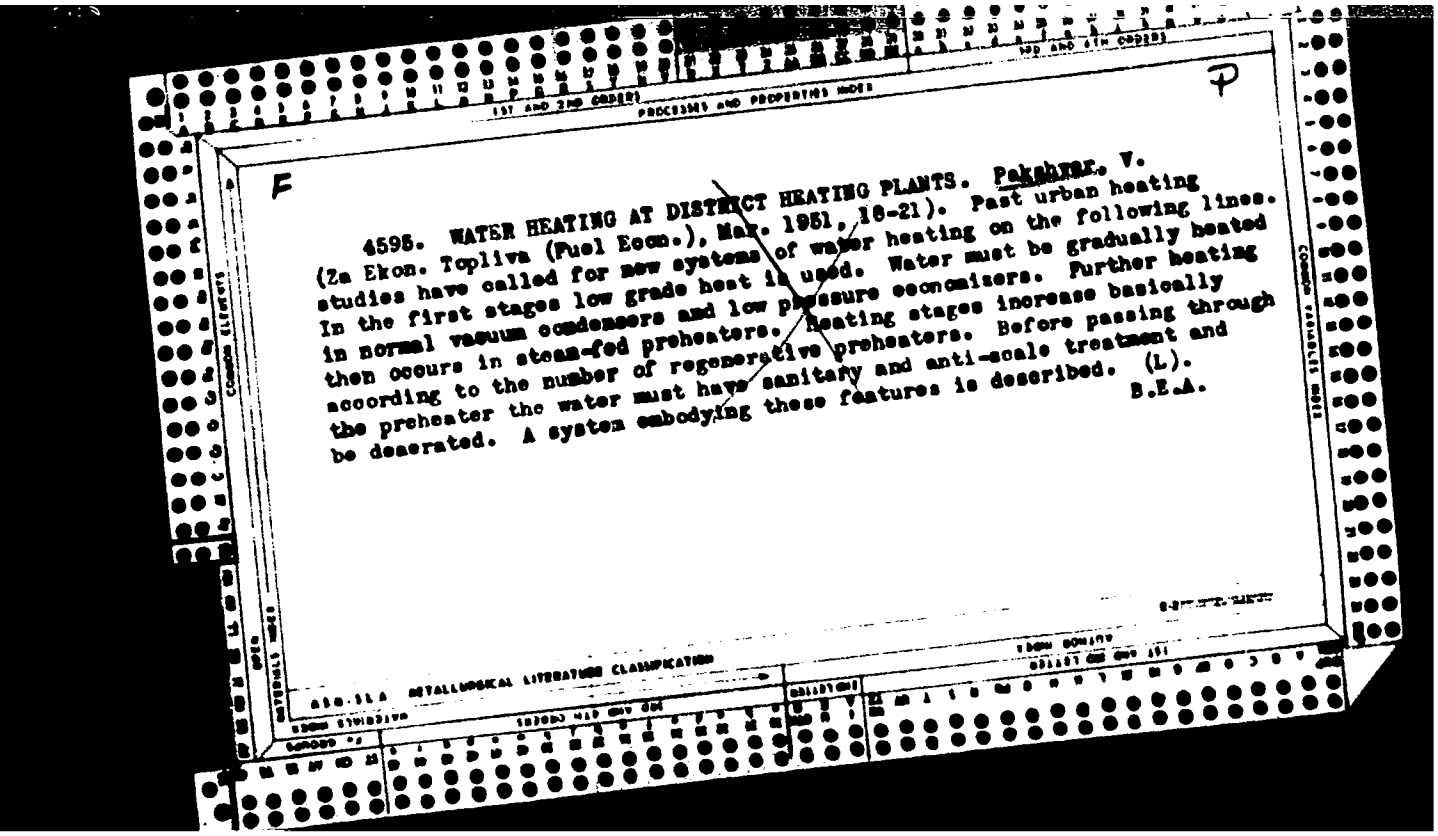
while too little attention is paid to using the heat of cooling water. However, book merits reprinting.

57/49733

PAKSHVER, V. B.



3515. DISTRICT HEATING OF TOWNS FROM A DISTANCE. Pakshver. VB
(Za Rkon. Toplive (Fuel Ken.), 1949, (11), 6-11).
In view of the growth of Soviet towns and consequent increasing difficulty of transporting fuel to central "heat and electr.city" stations and getting rid of ash, the author suggests siting s ations at a distance, close to sources of fuel and water, and supplying hot water to the town for heating and domestic use. He works out an imaginery project on these lines for a town of 1 million inhabitants with a station 120-200 km away, supplying water 150-180°C. through a single insulated pipe nearly 1 meter in diameter. He considers that this project would show a saving infuel of 1-3% and th t the high capital cost would be worth considering in view of the saving in transport and improved amenities.



F

4595. WATER HEATING AT DISTRICT HEATING PLANTS. Pekshtar, V.
(Za Ekon. Topliva (Fuel Econ.), Mar. 1951, 18-21). Past urban heating studies have called for new systems of water heating on the following lines. In the first stages low grade heat is used. Water must be gradually heated in normal vacuum condensers and low pressure economisers. Further heating then occurs in steam-fed preheaters. Heating stages increase basically according to the number of regenerative preheaters. Before passing through the preheater the water must have sanitary and anti-scale treatment and be deaerated. A system embodying these features is described. (L).
B.E.A.

P

PAKSHVER, V. B.

Heating from Central Stations

Single pipe system for distant heat supply. Za ekon. top., No. 2, 1952.

Monthly List of Russian Accessions, Library of Congress, March 1952. Unclassified.

PAKSHVER, V.B., kandidat tekhnicheskikh nauk.

Open and semi-open thermal electric power plants. Elek. sta. 25 no.8:61-62 Ag '54. (MLRA 7:9)
(Electric power plants)

PAKSHVER, V.B., kandidat tekhnicheskikh nauk.

Elektric power plant operating on 165 atm., 593° C steam. Elek.sta. 25 no.10:61-62 O '54. (MLRA 7:11)
(Electric power plants)

SOKOLOV, Yefim Yakovlevich, professor, redaktor; GROMOV, Nikolay Konstantinovich; SAFONOV, Aleksandr Petrovich; PAKSHVER, V.B., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Operation of heating systems] Ekspluatatsiia teplovykh setei. Pod red. E. Ia. Sokolova. Moskva, Gos.energ.izd-vo, 1955. 352 p. (MLRA 9:1)
(Heating)

PAKSHVER, V. B.

AID P - 1253

Subject : USSR/Engineering

Card 1/1 Pub. 110-a - 14/17

Author : Pakshver, V. B., Kand. of Tech. Sci.

Title : Units of great capacity in foreign steam electric power stations

Periodical : Teploenergetika, 1, 56-57, Ja 1955

Abstract : A survey is given of the development of steam-electric units of great capacities exceeding 100,000 kw, and lately 200,00 kw. The development of more powerful units in U.S.A., England, Germany and France is outlined. Seven references from non-Russian periodicals are quoted (1953-1954).

Institution : None

Submitted : No date

PAKSHVER, V. B.

AID P - 1401

Subject : USSR/Electricity

Card 1/1 Pub. 26 - 28/30

Author : Pakshver, V. B., Kand of Tech. Sci.

Title : Transportation, preparation and burning of waste in a coal handling plant of a large electric power station (Review of foreign periodicals)

Periodical : Elek. Sta., 2, 61-62, F 1955

Abstract : The author summarizes an article which appeared in the Proceedings of the Institute of Electrical Engineers, 1954, Part II, vol. 101, #82, pp.395 - 408.

Institution: None

Submitted : No date

PAKSHVER, V. B.

AID P - 2405

Subject : USSR/Electricity

Card 1/1 Pub. 26 - 4/33

Author : Pakshver, V. B., Kand. Tech. Sci.

Title : On projects for district heating

Periodical : Elek sta 5, 13-17, My 1955

Abstract : The article discusses plans for the building of heat and electric power plants in the most efficient manner, that is, considering the location of the plant, the fuel, and the feed-water. The single pipeline system is mentioned. Diagrams showing schematic layouts of the plant and city network are presented, and possible achievements are discussed in detail. Savings in pipeline steel are discussed, as well as the discharge of water and the use of a single supply pipeline within the city limits. More study on difficulties in planning is recommended. Four diagrams.

Institution: None

Submitted : No date

PAKSHVER, V. B.

Subject : USSR/Engineering AID P - 2557

Card 1/1 Pub. 110-a - 9/13

Author : Pakshver, V. B., Kand. Tech. Sci.

Title : Super high steam characteristics and district heating in USSR cities

Periodical : Teploenergetika, 6, 40-45, Je 1955

Abstract : The article discusses long-distance heat supply and shows that the erection of individual heat and electric power plant in cities included in a power system with high capacity heat and electric power plants is not economically sound. The author explains the necessity of building large heat and electric power plants with super high steam characteristics which would provide long-distance district heating. Four diagrams.

Institution: All-Union Heat Engineering Institute

Submitted : No date

PAKSHVER, V. G.

AID P - 2399

Subject : USSR/Engineering

Card 1/1 Pub. 110-a - 13/15

Author : Pakshver, V. B., Kand. Tech. Sci.

Title : New Electric Power Plants in France

Periodical : Teploenergetika, 7, 55-57, Jl 1955

Abstract : The article gives a review of new heat and electric power plants and gas-turbine power plants in France. Six French references, 1952-1955.

Institution: None

Submitted : No date

AID P - 2933

Subject : USSR/Electricity

Card 1/1 Pub. 26 - 30/31

Author : Pakshver, V. B., Kand. Tech. Sci.

Title : A steam power plant with a large capacity

Periodical : Elek. sta., 7, 60-62, Jl 1955

Abstract : The author reports in great detail on the construction of the Oak Creek Power Plant at Lake Michigan in the United States.

Institution : None

Submitted : No date

AID P - 5000

Subject : USSR/Engineering

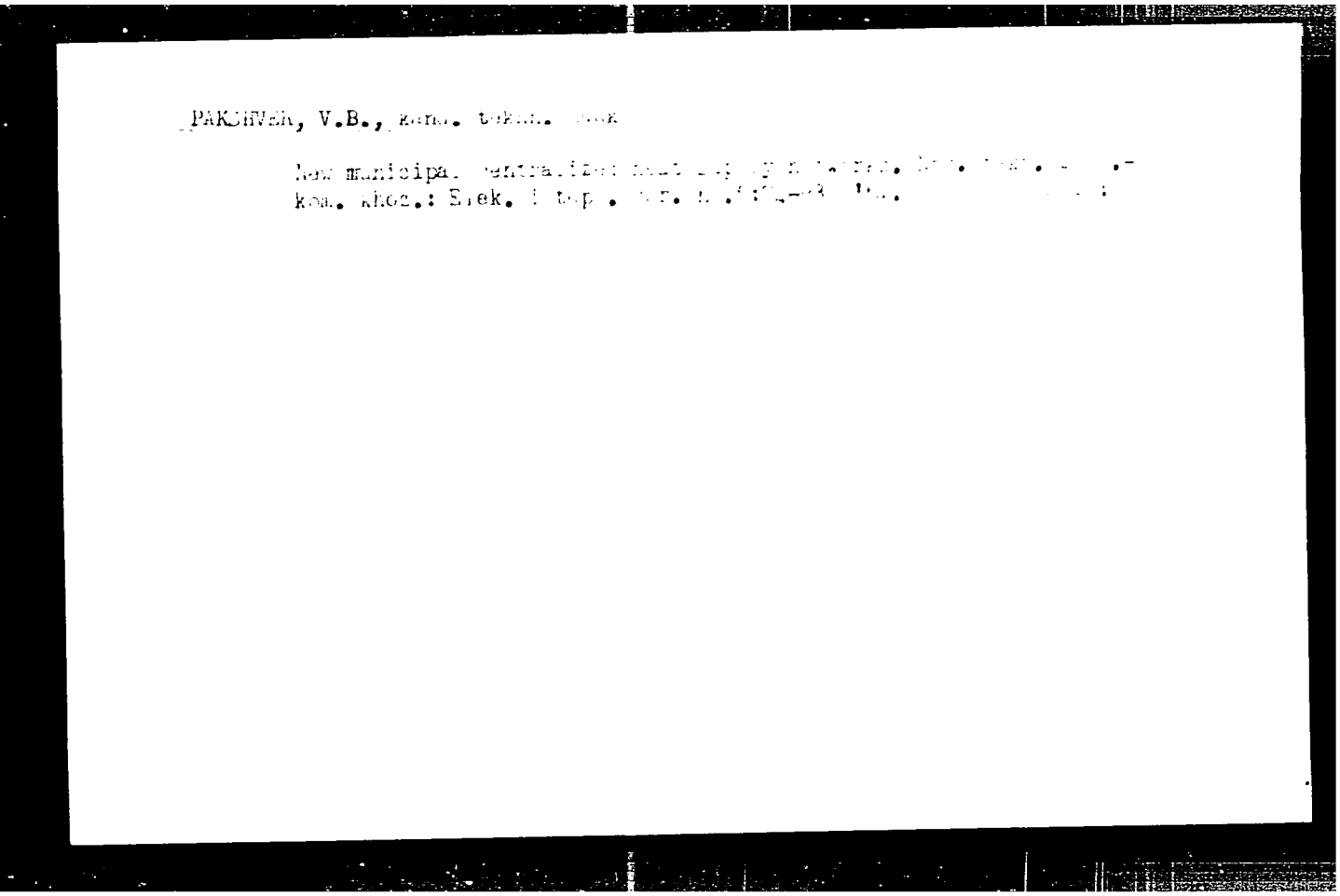
Card 1/2 Pub. 110-a - 2/17

Author : Pakshver, V. B., Kand. Tech. Sci.

Title : Types of heat- and power plants and of district heating systems to be used in the further development of power industry in the USSR.

Periodical : Teploenergetika, 9, 10-18, S 1956

Abstract : The values of admissible capacities of heat- and power plants operating in electric power systems are analyzed. The author discusses the selection of generating units and the efficiency of the parallel operations of heat- and power plants with regular steam-electric power stations. The admissible distance is examined for transfering heat from a large power plant depending on the unit capacities of generators and on the conditions of fuels supply. The water distribution systems of power stations are considered, as well as the use of hot



PAKSHVER, V.B., kand. tekhn. nauk

New municipal [illegible]
kom. khoz.: Ener. i top. [illegible]

FAKSHVER, V. F.

36659 [illegible] l'ne[illegible] [illegible] [illegible] , [illegible] , [illegible] ,
S. 6-11

SO: Letonis' Zhurnal'nykh [illegible], Vol. 45, 1949

[illegible], V.U., kand. tekhn. nauk, dots.

Schematics of thermal networks of large cities and distribution of heat supply sources. Trudy [illegible] m2.
(MIRA 17:8)

PAKSHVER, M.B., [translator]; KLYACHKO, V.A. [translator]; SHKROB, M.S., professor, doktor tekhnicheskikh nauk, redaktor; KOMAROV, L.P., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor

[Water preparation and water operating conditions in boilers of thermal electric power plants; a collection of articles. Translated from the English, German and French] Vodopodgotovka i vodnyi reshim kotlov na teplovykh elektrostantsiiakh; sbornik statei. Perevod s angliiskogo, nemetskogo i frantsuzskogo. Pod red. M.S.Shkroba. Moskva, Gos.energ. izd-vo. No.4. [Thermochemical and thermal preparation of feed water for steam boilers in thermal electric power plants in the United States]. Termokhimicheskaia i termicheskaia obrabotka pitatel'noi vody parovykh kotlov na teplovykh elektrostantsiiakh SShA. 1957. 79 p. (MLRA 10:7)
(Feed--Water purification)

PAKSHVER, V.B., kand.tekhn.nauk

Champagne-sur-Oise Electric Power Plant with 250 Mw units.
Energokhoz. za rub.no.6:5-7 N-D '60. (MIRA 14:3)
(France—Electric power plants)

PAKSHVER, V.B., kand.tekhn.nauk

Industrial electric power stations of Western Europe. Energokhoz. za rub. no.5:8-14 S-O '60. (MIRA 13:10)
(Europe, Western--Electric power plants)

PAKSHVER, V.B.

Trends in the development of the construction of thermal electric power stations in capitalist countries. Biul.tekh.-ekon.inform. no.10:83-88 '60. (MIRA 13:10)
(Electric power plants)

VYMOMKOV, Boris Mikhaylovich, inzh.; PUTNIK, Nikolay Petrovich, inzh.; PAKSHVER, V.B., kand.tekhn.nauk, retsenzent; GIRSHFEL'D, V.Ya., red.; VOROHIN, K.P., tekhn.red.

[Geothermal resources and their use in power engineering] Geometricheskie resursy i ikh energeticheskoe ispol'zovanie. Moskva, Gos.energ.izd-vo, 1960. 166 p. (MIRA 13:12)
(Power resources)

VYMORKOV, Boris Mikhaylovich, inzh.; PUTNIK, Nikolay Petrovich, inzh.; PAKSHVER, V.B., kand.tekhn.nauk, retsenzent; GIRSHFEL'D, V.Ya., red.; VORONIN, K.P., tekhn.red.

[Geothermal resources and their use in power engineering] Geotermicheskie resursy i ikh energeticheskoe ispol'zovanie. Moskva, Gos.energ.izd-vo, 1960. 166 p. (MIRA 13:10)
(Steam power plants)

PAKSHVER, V.B., kand. tekhn. nauk.

Breakdown statistics for low-powered American turbines. Energokhoz. za rub. no.6:12-13 N-D '59. (MIRA 13:3)
(United States--Turbines)

PAKSHVER, V.B., kand. tekhn. nauk

Second year of operation of the supercritical-pressure unit of the Philo Station (U.S.A.). Energokhoz. za rub. no.5:6-14 S-O '59.
(MIRA 13:2)
(Zanesville, Ohio--Steam power plants)

[illegible], V.R., [illegible]

[illegible] to [illegible] power plants. Ene[illegible]
[illegible] no.[illegible]-14 J1-[illegible] '59. ([illegible])
(United States—Electric power plants)

APPROVED FOR RELEASE: Tuesday, August 01, 2000 CIA-RDP86-00513R0012388

PAKSHUER, V.B.

8(6)

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 4, p 4 (USSR) SOV/112-59-4-6428

AUTHOR: Vol'berg, D. B., Doroshchuk, V. Ye., Krikunchik, A. B., Lebedev, B. P., Pakshver, V. B., Rokotyan, S. S., Semenkov, V. A., and Serbinovskiy, G. V.

TITLE: General Review of the Power Industry Abroad (1956-1957)

PERIODICAL: Energetika za rubezhom, 1958, Nr 2, pp 1-68

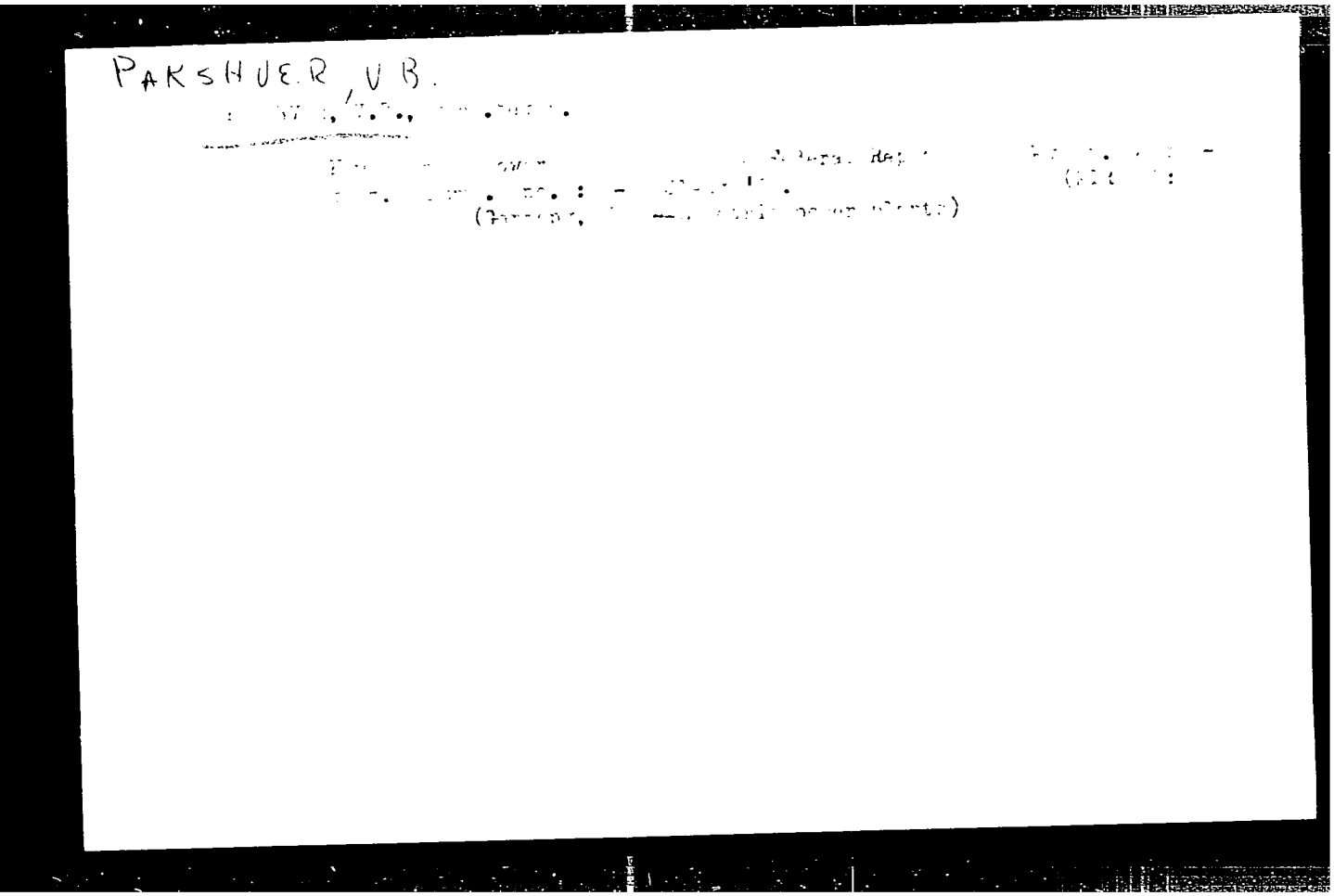
ABSTRACT: Bibliographic entry.

Card 1/1

VOL'FBERG, D.B.; DOROSHCHUK, V.Ye.; KRIKUNCHIK, A.B.; LEBEDEV, B.P.; PAKSHVER, V.B.; ROKOTYAN, S.S.; SEMENTSOV, V.A. [deceased]; SERBINOVSKIY, G.V.

General aspects. Elek. sta. supplement no. 1:2-4 Ja-F '58. (MIRA 11:7)

(Power engineering)



PAKSHVER, V. B. (Cand.Tech.Sci.)

"Foreign Information on Drives for Feed Pumps in Large Power Stations."

A Scientific-Technical Conference on Auxiliary Equipment for Power Station Boiler Houses. Moscow, 17 - 20 Dec 1957.

Teploenergetika, 1958, No. 4, pp. 90-91 ([illegible]_ (USSR)

PAKSHVER, V.B., kand.tekhn.nauk.

Equipment of the Eddystone Power Plant for supercritical steam conditions (from "El. Light and Power," 34 no.26, 1956). Elek.sta. supplement no.6:1-5 N-D '57. (MIRA 11:2)
(Philadelphia--Steam power plants)

PAKSHVER, V.B., kand.tekhn.nauk

Thermal electric power plants in Italy. Energokhoz.za rub. no.6:10-12 N-D '58. (MIRA 12:4)
(Italy--Electric power plants)

PAKSHVER, V.B., kand.tekhn.nauk

Design of a boiler with a 1700 t/h output. Energokhoz.za rub. no.1:27-28 Ja-F '59. (MIRA 12:4)
(Great Britain--Boilers)

PAKSHVER, V.B., kand. tekhn. nauk

The Hüls Electric Power Plant (Federal Republic of Germany) operating on a pressure of 300 atm. and fresh steam temperature of 600° C. (from "VGB-Mitteilungen," no. 55, 1958). Energokhoz. za rub. no.2: 7-17 Mr-Ap '59. (MIRA 12:5)
(Hüls, Germany--Electric power plants)

112-57-8-16279

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 8, p 35 (USSR)

AUTHOR: Pakshver, V. B.

TITLE: Central Heating Systems in the Countries of Western Europe (Teplofikatsiya v stranakh Zapadnoy Yevropy)

PERIODICAL: Energokh-vo za rubezhom (Power Utilities in Foreign Countries), 1956, Nr 4, pp 16-22

ABSTRACT: Bibliographic entry.

Card 1/1

8(6) SOV/112-59-3-4537

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 3, p 36 (USSR)

AUTHOR: Pakshver, V. B.

TITLE: Equipment at the Addiston Power Plant that has Supercritical Steam Parameters (Oborudovaniye elektrostantsii Eddiston na zakriticheskiye parametry para)

PERIODICAL: Energokh-vo za rubezhom, 1957, Nr 6, pp 1-5

ABSTRACT: Bibliographic entry.

Card 1/1

PAKSHVER, V.B., kand.tekhn.nauk

New thermal electric power stations in the Federal Republic of Germany. Elek. sta. no.4 Supplement:14-26 Jl-Ag '58. (MIRA 11:10)

(Germany, West--Electric power plants)

PROCESSES AND PROPERTIES INDEX

B-I-P

BC

• Fatigue of cyanide solutions. L. S. Pakhsh and N. A. [illegible] (Sovet. Zolotoprom., 1935, No. 3—4, [illegible].—The most active causes of fatigue are Cu and Zn, which, at amounts of 0·3 and 0·4%, reduce the extraction ability of the solution by 10 and 15%, respectively. Fe, [illegible] (in alkaline solution), Hg, and Na salts, up to 1, 0·3, 0·4, and 10%, respectively, are not harmful. The fatigue effect of a mixture of impurities is not additive. Fatigue is most pronounced in the percolation process and least in the process of cyaniding simultaneously with grinding. Ch. Abs. (e)

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

PAKSY, Laszlo

The 2d Borsod Days of Chemists. Magy kem lap 18 no.5: 204 My '63.

PAKSY, Laszlo

Sparking effect examination by the intermediate standard method. Pt.1. Magy kem folyoir 70 no.12:551-554 D '64.

1. Lenin Metallurgical Works and Technical University of Heavy Industry, Miskolc.

PAKSY, Laszlo

Studies in interelemental effects. Pt. 2. Magy kem folyoir 65 no. 12:472-476 '59.

1. Lenin Kohaszati Muvek, Miskolc-Diosgyor.

PAKSY, Laszlo

Significance of emission spectrum analysis in iron metallurgy.
Koh lap 96 no.2:67-73 F '63.

1. Lenin Kohaszati Muvek, Miskolc.

PAKSY, Laszlo

Experiments and discussions on the overlapping and diverging of steam clouds. Chemia anal 7 no.1:113-122 '62.

1. Lenin Kohaszati Müvek Diosgyörvasgyar, Miskolc, Hungary.

PAKSY, Laszlo (Miskolc)

A new quantitative evaluating method of spectrum analysis: the between-standard method. Acta chimica Hung 28 no.1/3:17-27 '61.
(EEAI 10:9)

1. Technische Universitat fur Schwermetallindustrie, Miskolc.

(Spectrum analysis) (Electrodes) (Zinc) (Iron)
(Nickel) (Titanium) (Magnesium) (Silicon)

PAKSY, Laszlo

Studies in the interactions among the elements.III. Magy kem folyoir 66 no.12:493-49(D '60.

1. Lenin Kohaszati Muvek, Miskolc-Diosgyor.

PAKSY, Laszlo

The "Tesla" spark as a source of light in spectrum analysis and its practical application. Magy kem folyoir 66 no.12:498-501 D '60.

1. Nehezipari Muszaki Egyetem, Miskolc.

PAKTER, M.K., OCHERET, A.S.; DUBROVSKAYA, D.P.

Increasing naphthalene yield in the processing of coal tar and obtaining crystalline naphthalene. Koks i khim. no.3:41-44 '63. (MIRA 16:3)

1. Makeyevskiy koksokhimicheskiy zavod.
(Naphthalene)

S/068/63/000/003/002/003
E071/E136

AUTHORS: Pakter, M.K., Ocheret, A.S., and Dubrovskaya, D.P.

TITLE: On the problem of increasing the yield of naphthalene during the processing of coal tar and production of crystalline naphthalene

PERIODICAL: Koks i khimiya, no.3, 1963, 41-44

TEXT: Laboratory studies of the possibilities of increasing the yield of naphthalene are described. The following problems were investigated: 1) separation of naphthalene from anthracene fraction and pitch distillate; 2) production of technical naphthalene by the rectification of naphthalene-containing fractions; and 3) improvements in the process of chemical purification of technical naphthalene. The separation of naphthalene from anthracene fraction can be achieved by modification of the existing plant, namely by taking outside the second stage evaporator and filling the freed space of the anthracene column with additional plates. In order to decrease naphthalene losses with pitch distillate, the latter should be either returned to tar or should be fed after preheating to an appropriate plate of

Card 1/2

the anthracene column. The separation of naphthalene from phenolic and heavy fractions should be done after their preliminary dephenolising, whereupon it is possible to separate 80-90% of naphthalene from heavy fraction and 93-96% from phenolic fraction in the form of a concentrated naphthalene fraction containing 80% and more of naphthalene. The production of technical naphthalene by rectification gives a considerable increase in the yield of naphthalene but such a product, when produced from sulphurous raw material, is unsatisfactory for the production of phthalic anhydride. Purification of such naphthalene consumes large amounts of reagents. An intense stirring during the purification of naphthalene with sulphuric acid, or treatment with aluminium chloride, considerably decreases naphthalene losses (from 14% to 7.5 and 4% respectively). The optimum naphthalene yield can be obtained by the production of mixed naphthalene and phenolic fraction during rectification of tar, dephenolising and pressing of the dephenolised mixture with subsequent purification of the pressed naphthalene with aluminium chloride. There are 5 tables.

ASSOCIATION: Makeyevskiy koksokhimicheskiy zavod
(Makeyevka Coking Works)

PAKTORIS, Kh. Sh., Physician

"The Protein Fraction of Plasma in Typhoid and Its Clinicoimmunological Significance." Sub 28 May 51, Second Moscow State Medical Inst imeni I. V. Stalin. Cand Medical Sci.

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

SO: Sum. No. 480, 9 May 55.

USSR / Virology. Human and Animal Viruses. E-3

Abs Jour: Ref Zhur-Biol., No 10, 1958, 43055.

Author : Paktoris, E. A., Vorontsova, L. A.
Inst : Not given.
Title : Clinico-Epidemiological Characteristics of Poliomyelitis Disease in Lithuanian SSR in 1955. Report 1.

Orig Pub: Zh. mikrobiol., epidemiol. i immunobiol., 1957, No 10, 129-134.

Abstract: No abstract.

Card 1/1

PAKTORIS, Ye.A.; VORONTSOVA, L.A.

Clinical epidemiological characteristics of poliomyelitis morbidity in Lithuania in 1956. Zhur.mikrobiol.epid. i immun.28 no.12:108-113 D '57. (MIRA 11:4)

1. Iz Vil'nyusskogo gosudarstvennogo universiteta i Sanitarno-epidemiologicheskogo upravleniya Ministerstva zdravookhraneniya Litovskoy SSR.
(POLIOMYELITIS, epidemiology,
in Lithuania (Rus)