the water was passed from top to bottom, but this soon clogged the beds and it was found necessary to reverse the flow. When raw Volga water was treated with magnesite sorbent, the silica content of the treated water was below 0.5 mg/litre silica for only 7 days, during which time 200 litres of water were purified. The silica content then rapidly rose and after two weeks it was 1.4 mg/litre silica. When the water was clarified before treatment, the purifier operated for 27 days before the silica content rose to 0.5 mg/litre, and during this time 1,320 litres of water were purified. Thereafter, the silica content rose to 1 mg/litre. When the water was first cation-treated, the filters operated for a month before the silica content rose to 0.5 mg/litre; thereafter it rose to 1 - 1.5 mg/litre silica. Information is given about the water hardness and the content of other ions during the tests. The chemical composition of the sorbent is discussed. In effect, the substance is magnesia cement and there is no agreed theory of the hardening of this substance. The various existing theories are briefly stated. The effect of the input water analysis on the mechanical properties and dissolution of the sorbent is considered. If very soft cation-treated water passes through the sorbent, some inevitably dissolves. The minimum enrichment of the water in bivalent magnesium and calcium ions is governed by the solubilities

of $Mg(OH)_2$ and $CaCO_3$ (see Table.3.). The relationship between the possible content of bivalent magnesium and the pH value of the water at the outlet from the tube has been calculated and is given in Table.4. In practice, equilibrium was not established and the magnesium content was less than this. To check whether any of the damage to the sorbent was mechanical, tests were made with the water flowing downwards through the bed, though it was occasionally reversed to increase the rate of flow through the bed. The tests were continued for 26 days and the sorbent was examined. The results show clearly that the pulverisation of the sorbent that was observed in the original tests resulted from chemical attack. Lime-treated water was de-silicated at the water purification plant of a metallurgical works. Previously, caustic magnesite treatment had yielded water of high silica content and had given rise to operating difficulties, largely because of unsatisfactory construction of the clarifiers. Moreover, the caustic magnesite was not treated properly. The tests with the magnesite sorbent are described in the preceding article by Mamet and Nikolayev. After a period of use, the ratio of magnesium oxide to magnesium chloride in the sorbent altered from 1.6:1 to 15:1. This is apparently caused by the washing-out of the soluble components, because the filtered water was not sufficiently alkaline,

The de-silication of water by the magnesite sorbent of the VODGEO Institute. SOV/96-58-10-11/25

due in turn to the use of carbonate alkalinity conditions in liming. Although the water was coagulated and lime-treated, the sorbent became contaminated with organic substances and iron oxides. It was shown that it was technologically possible to de-silicate lime-treated water in this way, but that it must first be filtered. The system needs further testing to check the silica capacity of the sorbent and the effectiveness of de-silication. There are 5 tables and 6 Soviet references.

ASSOCIATION: All-Union Thermo-Technical Institute (Vsesoyuznyy Teplotekhnicheskiy Institut)

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KVYATKOVSKIY, V.M.

SOV/24-58-10-34/34

AUTHOR: Solomonov, M. S.

TITLE: Conference on Water Preparation in Thermal Power Stations (O vodopodgotovke na teplovykh elektrostantsiyakh)

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, 1958, Nr 10, pp 159-160 (USSR)

ABSTRACT: During June 24-27, 1958, a conference took place on problems of water preparation in thermal power stations of high, intermediate, super-high and super-critical pressures. The conference was convened by the Commission on Steam of Very High Parameters of the Power Research Institute, Academy of Sciences USSR, imeni G. M. Krzhizhanovskiy, jointly with the Ministry of Power Stations USSR and the Moscow Scientific-Technical Society of the power industry. Over 400 representatives of scientific research establishments and of power stations participated. In the section on design, setting and operation of combined plant with magnesium desilisizing, the following papers were read:

1) "Experience in setting up and operation of water treatment plant with desilisizing by means of magnesium", V. F. Gvozdev (ORGRES),

2)"State and tasks in the development of plant for magnesium desilisizing of water in thermal power stations", V. M. Kvyat-

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Conference on Water Preparation in Thermal Power Stations

kovskiy (VTI),
3) "Schemes of automation of plant with desilisizing by means of magnesium", Ye. N. Krasotkin and V. M. Kvyatkovskiy (VTI),
4)"Problems of designing combined cathion water treatment plants with magnesium desilisizing", A. A. Krupchitskiy (Khar'kovskoe otdeleniye TEP),
5) "Desilisizing of the water by means of filters", O. N. Shemyakin (VODGEO),
6)"Investigation of the process of magnesium desilisizing of water at elevated temperatures", L. M. Zhivilov (VTI),
7)"Magnesium-cathion method of desilisizing water", L. S. Foshko (Donbassenergo).

In the second section, "Experience in designing, setting and operation of chemical desalting plant", the following papers were read:

1) "Results of investigations and of industrial tests of chemical desalting plant and prospects of their application in thermal power stations with super-high and above-critical steam parameters", F. G. Prokhorov (MES SSSR),

Conference on Water Preparation in Thermal Power Stations

2) "New ionites for water preparation plant and prospects of their industrial manufacture", A. V. Pashkov (Institut plastmass im. Frunze),
3)"Problems of design of chemical desalting plant", V. S. Chernov (KhOTEP), I. M. Sokolov,
4) "Automation of pressure filters for water treatment in power stations", S. M. Gurvich (MOTsKTI).
In addition to these papers, 20 informative communications of various local representatives were presented. It transpired that during recent years methods of magnesium desilisizing and of thorough chemical desalting of water have gained extensive utilisation in Soviet power stations and these played an important role in the development of Soviet steam power. Successful mastering of magnesium desilisizing of water together with the application of stepwise evaporation in boilers, washing of steam and other measures enabled ensuring reliable and economic exploitation of high pressure (110 atm) boilers in combined heat and power stations which operate with a large loss of condensate. During recent years rational designs of illuminators have been developed and also methods for dry dosing of caustic magnesite as well as mechanization of its handling and an original method was described

Conference on Water Preparation in Thermal Power Stations

of desilisizing by applying lime on the preliminarily magnesium-cathionated water. In individual cases it became possible to feed the water directly from the illuminators into cathion filters of the first stage, in which the processes of filtration and cathion treatment are combined. Work has started on automation and mechanisation of preliminary purification and of introducing treatment involving high temperature pre-heating of the water. Water treatment by application of lime and in individual cases by simultaneous desilisizing by magnesium in the case of heating up to 120°C permits more thorough elimination of silicon compounds. High temperature desilisizing requires special apparatus operating under pressure, thermally stable cathions and also new automatic circuits. Laboratory, semi-industrial and industrial tests of the filtration method of desilisizing water, developed by VODGEO have shown that this method is applicable also for H-a cathionated water without preliminary application of lime. In chemical desalting plants which use ionites of Soviet manufacture, it became possible to solve the problem of feeding very high pressure drum boilers (180 atm) and thus extensive prospects are opened up of using thoroughly desalted natural

Conference on Water Preparation in Thermal Power Stations

water and condensates for feeding powerful direct flow boilers of super-critical pressures. An ionite method of purification of condensates of nitrogen-fat plants permits utilising desalted condensate for feeding high pressure boilers and returning regeneration products into the technological cycle of the plant for producing from it the industrial product. Such a process of purification of the waste condensates allows reducing operational costs for water treatment and feeding of industrial heat-power stations in chemical works. Various deficiencies were pointed out in the existing technology of water purification as well as in the designs adopted in some of the projects.

USCOMM-DC-60,653

KVYATKOVSKIY, V.M., inzh.

Compensating the reactive power of inverter substations used for direct current transmission. Elek.sta. 29 no.11:40-46 N '58. (MIRA 11:12)

(Electric substations)

KVYATKOVSKIY, V.M.

Transient processes in the invertor conversion scheme under various methods of compensation of the reactive power. Izv. NIIPT no.4:19-37 '59. (MIRA 13:2)
(Electric circuit brakers)

SOV/96-59-5-13/19

AUTHORS: Kvyatkovskiy, V.M., Candidate of Technical Sciences and Zhivilova, L.M., Candidate of Technical Sciences

TITLE: An Investigation of the Process of Magnesia De-silication of Water at High Temperature (Issledovaniye protsessa magnezial'nogo obeskremnivaniya vody pri vysokoy temperature)

PERIODICAL: Teploenergetika, 1959, Nr 5, pp 70-74 (USSR)

ABSTRACT: The practice of treating water with lime or soda-lime at temperatures of 100°C and more is receiving attention in the American technical press, also special de-silicating agents are sometimes used. The main advantage of the proposal from the standpoint of Soviet practice is the prospect of obtaining more efficient de-silication. This article describes work done to assess the possibility of achieving good de-silication of water by lime treatment without introducing additional magnesia agents; also to investigate the possibility of improving de-silication when water is treated with caustic magnesite or in other ways. The laboratory equipment that was used to treat water at a temperature of 120 to 130°C is described and

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drawn schematically in Fig 1. The test results are in Fig 2, 3 and 4 and Tables 1, 2, 3, and 4. They show that by means of caustic magnesite at 120 to 130°C it is possible to reduce the content of silicic acid compounds in the water to a value of the order of 0.3 mg/litre SiO_3. At 40 to 80°C the silica content can only be reduced to 0.75 mg/litre. In making the tests, particular attention was paid to reducing the contact time of the liquid and suspended precipitates. It will be seen from the results plotted in Fig 4, that the process of de-silication of water at 120 to 130°C is completed quite quickly and is very nearly over in 15 minutes. If the contact time is increased to 1 hour there is some improvement in the de-silication but the time of 15 minutes is best because then the size of the treating equipment can be very much reduced. Comparative tests showed that there is nothing to choose between the temperatures of 120 and 130°C. When treating water with caustic magnesite at temperatures in this range a

An Investigation of the Process of Magnesia De-silication of Water At High Temperature

residual silica content of 0.5 mg/litre can be obtained with a caustic magnesite dose of 5 mg/mg and a contact time of 15 minutes. The process of de-silication was then worked out when using lime to treat various waters. These were ordinary water, magnesium-cationised water and finally water in which the initial magnesium ion content was artificially increased by introduction of magnesium chloride. The test results show that adequate de-silication may be obtained, provided the amount of magnesium separated from the treated water is not less than 1 mg equiv per 10 mg SiO_3 in the initial water. The data in Table 5 were obtained during lime treatment of magnesium-cationised water at 120 to 130°C and indicate that the de-silication is more effective than at 40°C. The results plotted in Fig 6 show that increasing the contact time only improves the de-silication from 0.8 mg/litre SiO_3 at 15 minutes to 0.7 mg/litre SiO_3 at 60 minutes. Table 4 gives for

comparison data that can be obtained when de-silicating water with caustic magnesite and by lime treatment of magnesium-cationised water at 120 to 130°C. The de-silication is improved by adding caustic magnesite to the water. De-silication by lime treatment of magnesium-cationised water is limited by the possibility of increasing the magnesium content in the water to be treated. It follows from the tests that the method can be used only for treating water with an initial hardness not less than 2.5 to 3.0 mg equiv/litre. If the water hardness is only 1 to 1.5 mg equiv/litre, the residual silica content is up to 1 mg/litre. When treating water at 120 to 130°C thermal losses are, of course, higher than at 40°C but this is more than counter-balanced because reduced blow-down can be used when the silica content of the water is reduced. It is calculated that overall the use of high temperature for de-silication will reduce the feed-water cost by about 35 kopeks a ton. It is concluded that the investigation has confirmed the

An Investigation of the Process of Magnesia De-silication of Water at High Temperature

technological and economic advantages of using a temperature of 120 to 130°C for water de-silication. It will be necessary to have temperature-stable cationite, also clarifiers and batch meters of special construction for operating under pressure. A further study will be required into the technology of de-silication and the design of equipment. There are 6 figures, 4 tables and 5 references, 2 of which are Soviet and 3 English.

ASSOCIATION: Vsesoyuznyy teplotekhnicheskiy institut (The All-Union Thermo-Technical Institute)

KVYATKOVSKIY, V.M., kand.tekhn.nauk

Treatment of water by methods involving the precipitation of dissolved impurities. Zhur. VKHO 5 no.6:637-645 '60. (MIRA 13:12)
(Water--Purification) (Water --Softening)

AKSEL'ROD, M.M.; KVYATKOVSKIY, V.M.

Technological and economic indices of d.c. power transmission and its comparison to other modes of transporting power resources. Izv. NIIPT no.6:92-111 '60. (MIRA 14:7)
(Electric power distribution—Direct current)
(Power resources—Transportation)

KVYATKOVSKIY, V.M., kand.tekhn.nauk; BAULINA, A.I., inzh.;
FOSHKOV, L.S., inzh.; LITVINOV, V.G., inzh.;
LOSEV, A.S., inzh.

Studying the hot liming process in water enriched with magnesium compounds. Teploenergetika 7 no.10:47-52 O '60.
(MIRA 14:9)

1. Vsesoyuznyy teplotekhnicheskiy institut i Donbassenergo.
(Feed water purification)

SHKROB, Mikhail Samoylovich, doktor tekhn. nauk; PROKHOROV, Fedor Georgiyevich, kand. tekhn. nauk. Prinimali uchastiye: AKOL'ZIN, P.A., doktor tekhn. nauk; APEL'TSIN, I.E., doktor tekhn. nauk; ZENKEVICH, Yu.V., kand. tekhn. nauk; KVYATKOVSKIY, V.M., kand. tekhn. nauk; KLYACHKO, V.A., doktor tekhn. nauk; GURVICH, S.M., inzh.; ORZHEROVSKIY, M.A., inzh.; STYRIKOVICH, M.A., retsenzent; MARTYNOVA, O.I., retsenzent; VORONIN, K.P., tekhn. red.

[Water treatment and water systems for steam-turbine electric power plants] Vodopodgotovka i vodnyi rezhim paroturbinnykh elektrostantsii. Moskva, Gos. energ. izd-vo, 1961. 470 p. (MIRA 14:9)
(Feed water purification) (Steam turbines)

KVYATKOVSKIY, V.M.; MEL'GUNOV, N.M.

Static stability of a d.c. power transmission system feeding a receiving load of a comparable power. Izv. NIIPT no.7:93-110 '61. (MIRA 14:9)
(Electric power distribution--Direct current)

KVYATKOVSKIY, V.M., kand.tekhn.nauk; SHCHUKINA, A.G., inzh.;
MATSKEVICH, G.V., inzh.

Automatic proportioning of reagents at the water treating installations of electric power plants. Teploenergetika 8 no.4:15-19 Ap '61. (MIRA 14:8)

1. Vsesoyuznyy teplotekhnicheskiy institut.
(Electric power plants)
(Feed-water purification)

KVYATKOVSKIY, V.M.

Joint operation of a converter with a [illegible] having a simple structure and [illegible] compensation. Izv. A.N. no.12:274-280 '57. (MIRA [illegible])

KVYATKOVSKIY, V.M.; MATSKEVICH, G.V.; SHEVTSOVA, A.G.

Automation of systems with clarifying agents for preliminary water purification. Vodopod., vod. rezh. i khimkont. na parosil. ust. no.1:132-142 '64. (MIRA 18:2)

1. Vsesoyuznyy ordena Trudovogo Krasnogo Znameni teplotekhnicheskiy institut imeni V.E. Dzerzhinskogo.

KVYATKOVSKIY, V. S. Prof.

"Effect of the Flow on the Chamber of the Operating Wheels in a Klapan Turbine," abstracted in Gidrotekh. stroi., Nos. 5/6, pp 28029, 1946

VIGM

KVYATKOVSKIY, V. S. ed.

Maiye gidroturbiny [Small hydraulic turbines]. Moskva, Masgiz, 1950.

SO: Monthly List of Russian Accessions, Vol 6 No 12 March 1954.

KVYAKTOVSKIY, V.S., professor.

Process of regulating the flow through (and capacity of) reaction turbines. Trudy VIGM no.12:5-18 '50. (MLRA 10:8)
(Hydraulic turbines)

KVYATKOVSKIY, V.S., laureat Stalinskoy premii, professor; MATVEYEVA, Ye.N., tekhnicheskiy redaktor; MODEL', B.I., tekhnicheskiy redaktor.

[Working processes in axial-flow hydraulic turbines] Rabochii protsess osevoi gidroturbiny. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1951. 156 p. Part 1: [Studying currents in axial-flow hydraulic turbine] Issledovanie potokov v osevykh gidroturbinakh. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut gidromashinostroeniia. Trudy, no.14). (MLRA 10:8)
(Hydraulic turbines)

KVYATKOVSKIY, V.S., laureat Stalinskoy premii, professor; SHCHAPOV, N.M., doktor tekhnicheskikh nauk, professor, redaktor; POPOVA, S.M., tekhnicheskiy redaktor; TIKHONOV, A.Ya., tekhnicheskiy redaktor.

[Working process of axial-flow hydraulic turbines; Pt. 2: Methods for hydraulic calculation of blades for hydraulic turbines] Rabochii protsess osevoi gidroturbiny; Pt. 2: O sposobakh gidravlicheskogo rascheta lopastei osevykh gidroturbin. Moskva, Gos. nauchn.-tekhn. izd-vo mashinostroitel'noi lit-ry, 1952. 140 p. (Vsesoiuznyi nauchno-issledovatel'skii institut gidromashinostroeniia. Trudy, no.15) (MLRA 9:8)

(Hydraulic turbines--Blades)

KVYATKOVSKIY, V.S.

KOTENEV, I.V.; KVYATKOVSKIY, V.S.

[Regulating the power and rotation speed of small hydraulic turbines] Regulirovanie moshchnosti i skorosti vrashcheniia malykh gidroturbin. Pod red. V.S.Kviatkovskogo. Moskva, Gos. energ. izd-vo, 1953. 55 p. (MLRA 7:4)

(Hydraulic turbines)

KVYATOVSKIY, V. S.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
Kvyatovskiy, V. S.	"The Working Process of an Axial-Flow Hydraulic Turbine"	All-Union Scientific Research Institute of Hydraulic Machine Building

SO: W-30604, 7 July 1954

[redacted], I. S.

"Operating Process of an Axial Hydraulic Turbine." Dr Tech Sci, Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov, 9 Feb 54. Dissertation (Vechernyaya Moskva Moscow, 1 Feb 54)

SO: SUM 186, 19 Aug 1954

SOV/124-57-9-10371

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 9, p 69 (USSR)

AUTHOR: Kvyatkovskiy, V.S.

TITLE: On the Cavitational Properties of Hydraulic Turbines (O kavitatsionnykh svoystvakh gidroturbin)

PERIODICAL: Tr. Mosk. energ. in-ta, 1956, Nr 19, pp 329-353

ABSTRACT: The cavitation coefficient is found from the Bernoulli equation for the absolute and relative flow through a turbine. Assuming that the exit velocity triangle is an isosceles one, and replacing the velocities with velocity coefficients, which are constant for geometrically-similar turbines, the author develops an equation for the determination of the cavitation coefficient of an actual turbine in accordance with known laboratory results of cavitation tests on a model turbine. The practical value of the formula obtained remains yet to be confirmed by a test. The paper suggests a method for the quantitative evaluation of the influence of the shape of the various working parts of a turbine on its cavitational properties. The influence of the spiral casing, of the shape of the guiding distributor and draft tube, and of the location of the main shaft is analyzed. On the basis of the

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SOV/124-57-9-10371

On the Cavitational Properties of Hydraulic Turbines

formulae obtained a comparison is made of vertical and horizontal turbines identical in size and with identical tailwater submersion and cavitation expectancy for curved- and straight-centerline draft tubes. The advantages of a horizontal turbine with a straight-centerline draft tube are demonstrated. Because of the higher efficiency of the horizontal reaction-type axial turbines, their smaller foundation depth and the availability of a reserve plant capacity during a flood period, a wider use of this type of turbine is suggested.

I. I. Orlov

Card 2/2

KOVALEV, N.N., prof.; KVYATKOVSKIY, V.S., doktor tekhn.nauk, prof.; TISTROVA, O.N., red.; VORONIN, K.P., tekhn.red.

[Hydroaulic turbine industry in U.S.S.R.] Gidroturbinostroenie v SSSR. Moskva, Gos. energet. izd-vo 1957. 151 p. (MIRA 11:3)

1. Chlen-korrespondent AN SSSR (for Kovalev)
(Hydraulic turbines)

KVYATKOVSKIY, V.S., doktor tekhn.nauk, prof.

Two new systems for reaction rotating vane hydraulic turbines.
Gidr.stroi. 26 no.11:62-67 N '57. (MIRA 10:10)
(Hydraulic turbines)

KVYATKOVSKIY, V.S.

PHASE I BOOK EXPLOITATION 1065

Vsesoyuznyy nauchno-issledovatel'skiy institut gidromashinostroyeniya

Issledovaniya i raschety gidroturbin i regulyatorov (Investigation and Design of Hydraulic Turbines and Regulators) Moscow, Mashgiz, 1958. 129 p. (Series: Its: Trudy, vyp. 21) 4,000 copies printed.

Ed.: Kvyatkovskiy, V.S., Doctor of Technical Sciences, Professor; Ed. of Publishing House: Prokof'yeva, L.G.; Tech. Eds: Shikin, S.T. and Gerasimova, Ye.S.; Managing Ed. for Literature on Machine Building and Instrument Construction (Mashgiz): Pokrovskiy, N.V., Engineer.

PURPOSE: This book is intended for engineers, technical workers, and graduate students and also for upperclassmen of vuzes and tekhnikums studying problems of hydraulic turbine building.

COVERAGE: This is a collection of articles dealing with investigations of hydraulic turbines and regulators and their design. The following subjects are covered: results of model testing of im-

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pulse and reaction (axial) hydraulic turbines, theoretical investigations and calculations on hydraulics of rotors of axial and radial-axial (mixed flow) hydraulic turbines, characteristics of cavitational and starting regimes of axial hydraulic turbines, and analysis and calculations of dynamics of speed regulators of hydraulic turbines.

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AVAILABLE: Library of Congress

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KVYATKOVSKIY, V.S., doktor tekhn.nauk, prof.

Designing runner blades for Francis-type hydraulic turbines. Trudy VIGM no.21:39-56 '58. (MIRA 11:11)
(Hydraulic turbines--Blades)

8(6) PHASE I BOOK EXPLOITATION SOV/2226

Vsesoyuznyy nauchno-issledovatel'skiy institut gidromashinostroyeniya

Issledovaniye gidroturbin (Study of Hydraulic Turbines) Moscow, Mashgiz, 1959. 195 p. (Series: Its: Trudy, vyp. 23) 1,900 copies printed.

Additional Sponsoring Agency: USSR. Gosudarstvennaya planovaya komissiya. Glavnoye upravleniye nauchno-issledovatel'skikh i proyektnykh organizatsiy.

Ed.: V.S. Kvyatkovskiy, Doctor of Technical Sciences; Ed. of Publishing House: L.G. Prokof'yeva; and A.M. Monastyrskaya; Tech. Ed.: V.D. El'kind; Managing Ed. for Literature on Machine Building and Instrument Making: N.V. Pokrovskiy, Engineer.

PURPOSE: This book may be of interest to designers, operations personnel of hydroelectric stations, and students of vtuzes who are specializing in the field of hydraulic turbine manufacturing.

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Study of Hydraulic Turbines SOV/2226

COVERAGE: This is the 23rd issue of the Transactions of VIGM. It contains four articles by Professor N.M. Shchapov, Doctor of Technical Sciences, and is dedicated to him on the occasion of his 50th anniversary in the teaching profession. The first article deals with the method of determining the efficiency of an actual turbine from the results of model testing. The second article deals with the selection of the optimum length of a hydraulic turbine draft tube. Various characteristics of a draft tube are described. In the third article an attempt is made to substantiate the theory of hydraulic engines utilizing the energy of open channel flow. The last article describes annular-flow impulse turbines. No personalities are mentioned. References follow each article.

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Study of Hydraulic Turbines SOV/2226

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GO/ec
10-9-59

ALEKSANDROV, B.K., prof.; prinimali uchastiye: IVANOV-SMOLENSKIY, A.V., dots.; KORKHOVA, V.I., inzh.; OBOROTOVA, M.G., inzh.; KVYATKOVSKIY, V.S., prof.; ALEKSEYEV, A.Ye., prof.

Hydroelectric power stations with horizontal generating units. Gidr. stroi. 30 no.6:1-8 Je.'60. (MIRA 13:7)

1. Chlen-korrespondent AN SSSR (for Aledsandrov).
(Hydroelectric power stations)

KVYATKOVSKIY, V.S., doktor tekhn.nauk, prof.

Development of the hydraulic turbine industry in the U.S.S.R.
Trudy MEI no.33:267-284 '60. (MIRA 15:3)
(Hydraulic turbines)

KVYATKOVSKIY, V.V.

Stationary installation for metal recovery from slag. Stal' 15 no.10:948-949 O '55. (MIRA 9:1)

1.Zaved imeni Dzerzhinskogo.
(Slag) (Magnetic separation of ores)

KVYATKOVSKIY, Ye.M.; TSIGEL'MAN, I.S.

Simplified method of treating metal ore assaying samples.
Razved.i okhr.nedr 22 no.5:28-31 My '56. (MLRA 9:9)

1. Leningradskiy gornyy institut.
(Ores--Sampling and estimation)
(Assaying apparatus)

DUBOV, R.I.; KVYATKOVSKIY, Ye.M.

Spectrum analysis of metallometric samples for tungsten.
Izv. vys. ucheb. zav.; geol. i razv. 2 no.2:102-106 F '59.
(MIRA 12:10)

1.Leningradskiy gornyy institut im. G.V. Plekhanova. Kafedra geofizicheskikh metodov razvedki.
(Tungsten--Spectra)

KVYATKOVSKIY, Ye.M.

Some regularities in the relief development of mountainous regions and the formation of secondary dispersion halos. Zap. LGI 39 no.2:124-128 '61. (MIRA 15:2)
(Transbaikalia--Ore deposits)

KVYATKOVSKIY, Ye.M.; KRITSUK, I.N.

Method of metallometric surveying in prospecting for tin deposits.
Zap. LGI 39 no.2:129-135 '61. (MIRA 15:2)
(Transbaikalia--Tin ores)

S/081/61/000/023/012/061
B117/B147

AUTHORS: Dubov, R. I., Kvyatkovskiy, Ye. M.

TITLE: Distribution of tungsten in secondary aureoles of diffusion

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1961, 103, abstract 23G86 (Zap. Leningr. gorn. in-ta, v. 39, no. 2, 1961, 136-144)

TEXT: One of the tungsten deposits in the eastern Transbaikal region is connected to greisenizated muscovite-granites and Paleozoic sandstones and schists cemented with chert. The method of sampling loose deposits is described, from which 1109 samples have been taken in three sections at different depths. It has been found that in samples taken from greater depths the relative number of samples with appreciable amounts of W increases. The configuration and size of aureoles of diffusion depend on the eluvial-diluvial fraction used in the analysis. The manifest themselves most clearly by an analysis of the coarse alluvial fraction. A study of the distribution of W according to fractions shows that its high concentrations are fixed in 1 - 3 and 0.25 - 1 mm fragments. Coarser and finer fractions show a poorer W content. The portion of clay of the

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Distribution of tungsten in...

S/081/61/000/023/012/061
B117/B147

deposits contains virtually no W. The distribution of Sn according to depths and fractions is essentially equal to that of W. [Abstracter's note: Complete translation.]

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Abs Jour : Ref Zhur Fizika, No 12, 1959, 27913

Author : Nesvadba, Otabar; Kwaczek, Otmar; Machala, Frantisek

Inst : Tesla Roznov, Czechsolovakia

Title : Geometrical Model of a Fused p-n-p Junction

Orig Pub : Slaboproudy obzor, 1958, 19, No 11, 755-758

Abstract : As is known, oxides on the surface of germanium junctions, and also the warm humid ambient reduce the constancy of the properties of transistors both during storage time and during the operating process. To attain this constancy by technological means, a geometrical model is proposed for the fused p-n-p junction. The action of this model is investigated when moisture acts on the junction at an increased

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CZECHOSLOVAKIA/Electronics - Photocells and Semiconductor Device. H

Abs Jour : Ref Zhur Fizika, No 12, 1959, 27913

temperature, by measuring such electric parameters as the collector current in a grounded-base circuit and with the emitter disconnected, the surface current of the collector for a grounded emitter, the rate of surface recombination.
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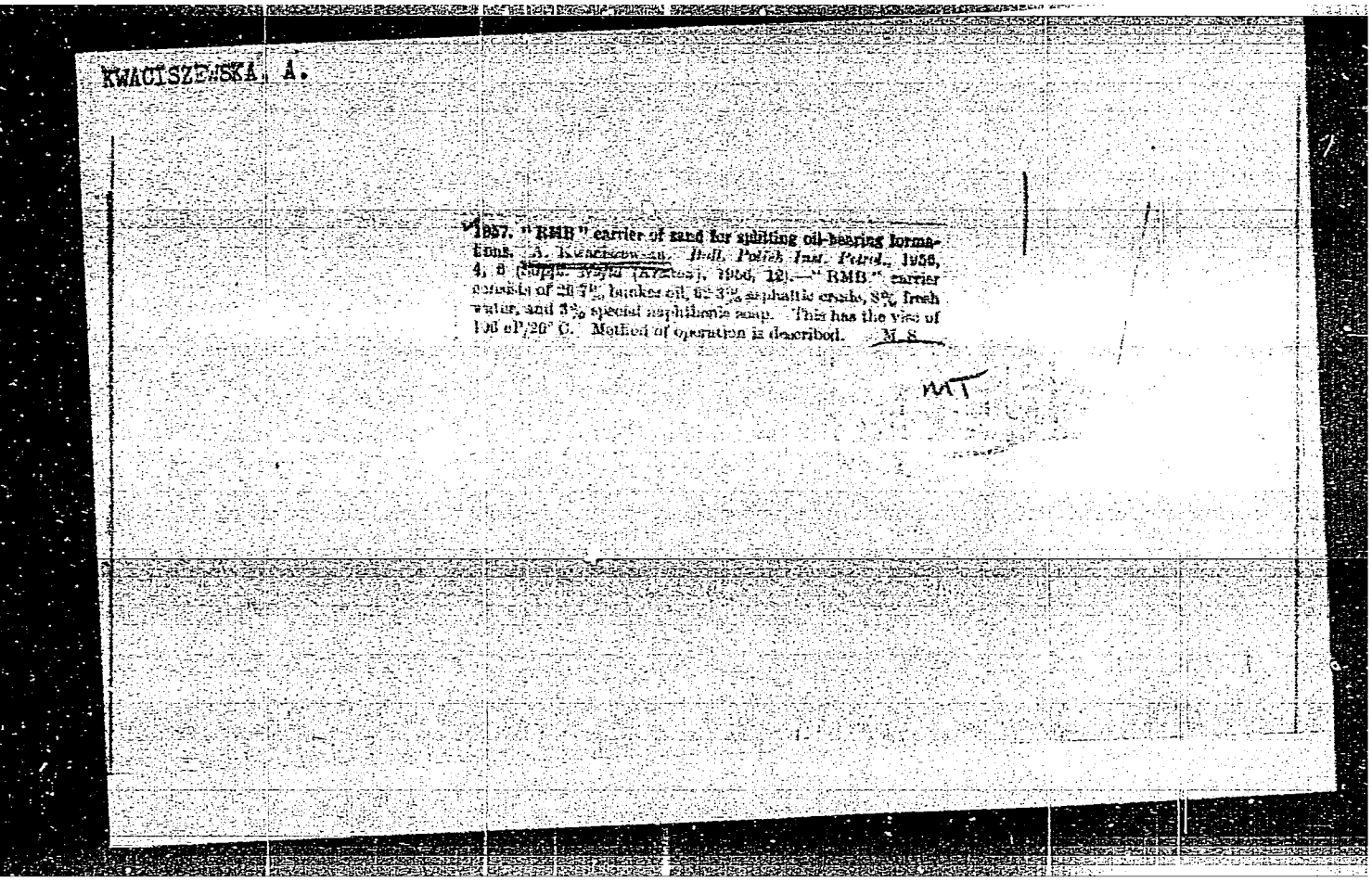

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