TYUTEVA, M.D.; YEVTYUSHKIN, Yu.A.

Cast cutting tools. Lit.proizv. no.3:38-39 Mr '62. (MIRA 15:3)
(Tool steel) (Founding)

S/122/62/000/003/007/007
D262/D302

AUTHORS: Tyuteva, N.D., Candidate of Technical Sciences and Yevtyushkin, Yu.A., Engineer

TITLE: Manufacture of a cutting tool from high speed steel with an addition of boron

PERIODICAL: Vestnik mashinostroyeniya, no. 3, 1962, 82 - 83

TEXT: A method of making cast steel cutting tools in chill moulds is described. To 20 kg of melted steel Р9 or Р18 (R9 or R18) boron in powder form (40 g of 5 % ferroboron) was introduced. As a deoxidizing agent aluminum (0.2 %) was used, and loss of carbon was compensated for by the introduction of 0.2 % carbon for steel R18 and 0.1 % for steel R9, by adding to 20 kg of remelted steel 800 g of carbonized, high speed steel R18. Chemical composition was similar to that of steel R18, carbon content increased (1.0 - 1.2 %) boron content 0.001 %. Cast tools were tempered twice at 600°C or 620°C for 1 hour. The tools were then tested on automatic turret machines and the obtained results showed that the working life of

Card 1/2

Manufacture of a cutting tool from ... S/122/62/000/003/007/007
D262/D302

these tools was higher compared with the working life of tools made of forged steel R18. There are 2 tables.

Card 2/2

YEVTYUSHKIN, Yu.A.

Brittleness of cast, high-speed steel. Izv.vys.ucheb.zav.; chern. met. 6 no.1:136-138 '63. (MIRA 16:2)

1. Tomskiy politekhnicheskiy institut.
(Tool steel—Brittleness)

S/148/63/000/001/016/019
E073/E451

AUTHOR: Yevtyushkin, Yu.A.

TITLE: On the brittleness of high-speed cast steel

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no.1, 1963, 136-138

TEXT: In the determination of the most satisfactory heat treatment conditions, type P18 (R18) high-speed steel with 1.0 to 1.3% C was produced in an induction furnace and cast centrifugally into chill moulds. To prevent decarburization, the cast tools were vacuum annealed (1.7 to 2 x 10^{-2} mm Hg). The following results were obtained:

Annealing temperature, °C	900	1000	1100	1200	1200
Holding time, h	5	5	5	1	3
a_k, kgm/cm^2	0.4-0.69	0.5-1.0	0.6-1.0	1.1-1.8	0.6-1.2

The most uniform carbide distribution is obtained by annealing for one hour at 1200°C. Usually, tools cast in chill moulds harden

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S/148/63/000/001/016/019
E073/E451

On the brittleness ...

during cooling in the moulds and subsequent heat treatment consists of tempering twice, in the same way as for forged steel. Investigations have shown, however, that steel cast centrifugally into chill moulds must be tempered at higher temperatures because the austenite is more highly alloyed and the holding time must be shortened, since maximum secondary hardness is achieved after holding for 20 min at 600°C. The following short-duration tempering conditions are considered to be optimum: tempering twice at 600°C with holding times of 20 and 60 min respectively. Thin and long tools should be isothermally annealed to obtain secondary bainite, e.g. casting, heating to 600°C, holding for 2 hours, transferred into a 260°C salt bath, holding for 4 hours, cooling in air. Test results are given for cutting tools produced experimentally and subjected to different heat treatments. Tools isothermally heat treated to obtain secondary bainite had the highest impact strength (1.6 to 2.0 kgm/cm^2) and bending strength (200 kg/mm^2). The time between regrinds after this heat treatment was twice as long as for the tool subjected to short-duration tempering. There are 1 figure and 1 table.

Card 2/3

S/148/63/000/001/016/019
E073/E451

On the brittleness ...

ASSOCIATION: Tomskiy politekhnicheskiy institut
(Tomsk Polytechnic Institute)

SUBMITTED: February 21, 1961

Card 3/3

YEVTYUTOV, A.A.; MAKAROV, N.A.; PLYUSHKIN, M.Z.; CHEMODANOV, V.S.

Discussion at the Urals' aluminum plant of V.A. Mazel's book "Production of alumina." A.A. Evtiutov and others. TSvet. met. 29 no.10:85-86 O '56. (MLRA 9:12)

(Alumina)
(Mazel, V.A.)

KUZNETSOV, S.I.; SEREBRENNIKOV, O.V.; DEREVYANKIN, V.A.; VOLKOVA, P.I.; PAVLOV, F.N.; YEVTYUTOV, A.A.; CHEMODANOV, V.S.; STOLYAR, B.A.; KONOVALOV, I.V.; LIVER, V.B.; MIYCHENKO, V.S.; SMIRNOV, B.A.

"Production of alumina" by A.I. Lainer. Reviewed by S.I. Kuznetsov and others. TSvet. met. 34 no.11:85-86 N '61. (MIRA 14:11)

1. Ural'skiy politekhnicheskiy institut (for Kuznetsov, Serebrennikov, Derevyankin). 2. Ural'skiy filial AN SSSR (for Volkova, Pavlov). 3. Ural'skiy alyuminiyevyy zavod (for Yevtyutov, Chemodanov, Stolyar). 4. Bogoslovskiy alyuminiyevyy zavod (for Konovalov, Liver, Miychenko). 5. Sverdlovskiy Sovnarkhoz (for Smirnov).

(Alumina)
(Lainer, A.I.)

SILINA, Ye.I.; ZLOKAZOVA, T.M.; ZOLOTAREVA, M.G. Prinimali uchastiye: YEVTYUTOV, A.A.; LEVINA, P.I.; CHEMODANOV, V.S.; SVECHNIKOVA, L.I.; KRIVONISHCHENKO, V.V.

Experimental factory testing of polyacrylamide flocculent as a substitute for meal in the production of alumina. TSvet. met. 37 no.12:44-46 D '64 (MIRA 18:2)

1. Ural'skiy alyuminiyevyy zavod (for Yevtyutov, Levina, Chemodanov). 2. Ural'skiy nauchno-issledovatel'skiy i proyektnyy institut obogashcheniya i mekhanicheskoy obrabotki poleznykh iskopayemykh (for Svechnikova, Krivonishchenko).

TISHKOV, Yu.Ya.; KREST'YANINOV, V.F.; GUBA, P.L.; PRIBYTKOV, A.Ye.; YEVTYUTOV, P.A.

Using new technological processes. NTO 5 no.1:29 Ja '63. (MIRA 16:5)

(Zlatoust—Iron and steel plants)

YEVYAGIN, B.B.i PINSKYER, E.G.

29577

Elyektronograficheskoye opryedyelyeniye elyemyentarnykh yachyeyek pirofillita i tal'ka i strukturnaya svyaz'etikh minyerala s montmorillonitom. Doklady Akad. Nauk SSSR, Novaya Syeriya, T. LXVIII, No.3, 1949, s.505-08

SO: LETOPIS' NO. 40

KRAVTSOVA, I.; YEVZERIKHIN, E.

"Sport" and "Turist" cameras. Sov.foto 20 no.5:33 My '60. (MIRA 13:7)
(Cameras)

YEVZERIKHIN, E.

Behind the wording of a great plan. Sov.foto 20 no.7:7-8 Jl '60. (MIRA 13:7)

1. Fotokorrespondent Fotokhroniki TASS.
(Novyy Lipetsk--Metallurgical plants)
(Photography, Journalistic)

LYUBARSKIY, G.D.; YEVZERIKHIN, Ye.I.; SLINKIN, A.A.; Prinimala uchastiye FEDOTOVA, G.A., studentka

Catalytic activity of solid solutions in the system nickel - copper. Kin. i kat. 5 no.2:311-318 Mr-Ap '64. (MIRA 17:8)

1. Fiziko-khimicheskiy institut imeni Karpova.

YEVZERIKHIN, Ye.I.; LYUBARSKIY, G.D.

Catalytic activity of alloys of the nickel - cobalt system.
Kin. i kat. 5 no.5:952-955 S-O '64. (MIRA 17:12)

1. Fizikc-khimicheskiy institut imeni Karpova.

VOSKRESENSKIY, L.; YEVZEROV, A., tekhnoruk.; SHLIONSKAYA, Ye., KAUFMAN, S., inzhener-khimik; FIDLER, I., mekhanik; VINOKUR, V., khudozhnik.

Photographic printing on blankets. Prom.koop.no.2:19-21 F '56. (MLRA 9:7)

1.Predsedatel' pravleniya arteli "Promtkach" (for Voskresenskiy)
(Textile printing)(Photomechanical process)

L 10001-67 EWT(1) GW
ACC NR: AP6029955 SOURCE CODE: UR/0413/66/000/015/0094/0094

16

INVENTOR: Vekhter, B. Yu.; Belousnikov, V. S.; Ayzman, Yu. A.; Sokolinskiy, Ya. A.; [illegible], [illegible] A.; Aspidov, A. I.; Fedorov, V. N.; Ivanov, A. M.; Malinskiy, S. A.; [illegible]evskiy, V. V.; Pal'k, V. Kh.; Vysotskiy, Yu. A.; Zamskiy, V. M.; Bystrov, V. V.; [illegible]ov, V. S.; Slobodkin, I. V.; Yevzerov, D. A.; Germanov, Yu. G.; Maksimov, N. P.; [illegible]yenkov, [illegible] A.; Mishchalin, V. V.

ORG: none

TITLE: Seismic station. Class 42, No. 184466 [announced by "Neftepribor" Factory of the Instrument Manufacture Administration of Mosgorsovnarkhoz (Zavod "Neftepribor" Upravleniya priborostroyeniya Mosgorsovnarkhoza)]

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 94

TOPIC TAGS: seismologic station, seismologic instrument

ABSTRACT: This Author Certificate presents a seismic station containing a seismic signal detector, a recording amplifier unit, an oscillograph, a magnetic drum recorder, a channel reproduction unit, a control unit, a reproduction amplifier, a multichannel borehole probe, a drum with photographic paper, a retransmitting unit, and a power supply. To increase the reliability when transferring from operation with the method of reflected waves to the method of refracted waves, a filter unit is connected between the first and second stages of the recording amplifier unit. A

Card 1/2 UDC: 550.340:19

L 10061-67

ACC NR: AP6029933

modulator-demodulator unit and a reel type magnetic recorder are connected in series to the output of the recording amplifier unit. For operation with the method of refracted waves, the filter unit has frequency cutoffs of 7--30 hz, and for operation at sea--frequency cutoffs of 20--50 hz. To increase the reliability of the recorded data with operation by the method of regulated directional reception, a switching unit for the channels to be summed, a static correction unit, and a summing unit are connected in series between the magnetic drum recorder and the reproduction amplifier. To increase the reliability when transferring from operation with the method of reflected waves to seismic logging, a frequency selection unit is connected between the multichannel borehole probe and the magnetic drum recorder. To improve the quality of the recorded material, an electron beam unit for introducing static and dynamic corrections is connected between the reproduction amplifier and the drum with photographic paper.

SUB CODE: 08/ SUBM DATE: 05May65

Card 2/2

YEVZEROV, N.

New features in medical care. Okhr.truda i sots.strakh. 3 no.4:39-42 Ap '60. (MIRA 13:6)
(MEDICINE, INDUSTRIAL)

YEVZEROV, N.

Good things for all! Okhr. truda i sots. strakh. 4 no. 2:18-20 F '61. (MIRA 14:2)

(Industrial hygiene)

GRAVE, M.K., YEVZEROV, V.F.

Latest and present tectonic movements in the central part of the Kola Peninsula

Report to be submitted for the First International Symposium on recent crustal movements, (IUGG) Leipzig 21-26 May 1962

GRAVE, M.K.; YEVZEROV, V.Ya.; YEGOROVA, I.A.

Interglacial sediments in the central part of the Kola Peninsula and boreal transgression. Dokl. AN SSSR 160 no.3:673-675 Ja '65. (MIRA 18:3)

1. Kol'skiy filial im. S.M. Kirova AN SSSR. Submitted June 3, 1964.

~~GIRIN, GEORGIY KONSTANTINOVICH~~

YEVZEROV, V. Ye.

N/5
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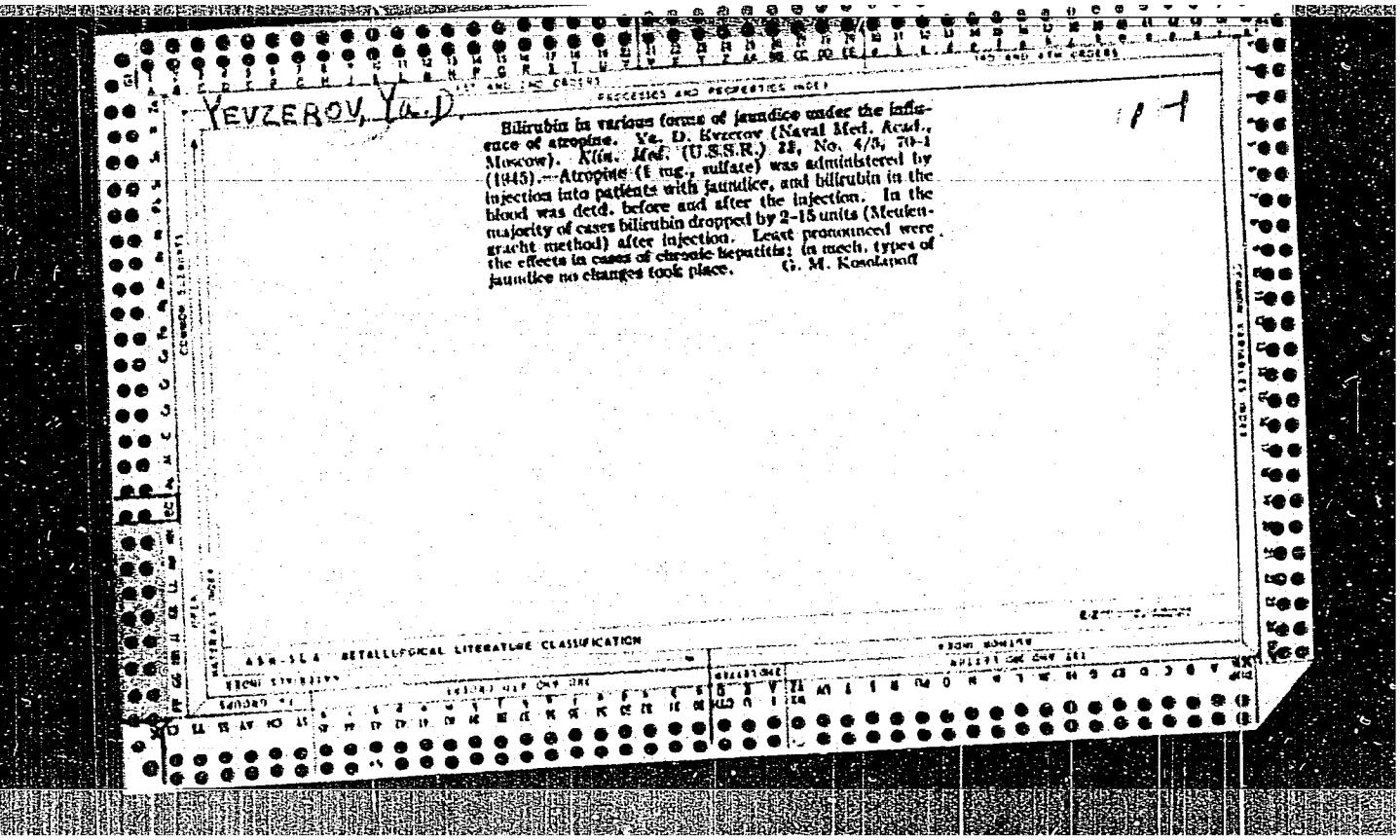
GIRIN, GEORGIY KONSTANTINOVICH

Organizatsiya i tekhnika torgovli promyshlennymi tovarami (Organization and technique of trade in industrial goods, by) G. K. Girin i V. E. Yevzerov. Moskva, Gos. Izd-vo Torgovoy Literatury, 1956.

415 P. illus., diagrs.

MB



YEVZEROV, Ya. D.

Bilirubin in various forms of jaundice under the influence of atropine. Ye. D. Evzerov (Naval Med. Acad., Moscow). *Klin. Med.* (U.S.S.R.) 23, No. 4/5, 70–1 (1945).—Atropine (1 mg., sulfate) was administered by injection into patients with jaundice, and bilirubin in the blood was detd. before and after the injection. In the majority of cases bilirubin dropped by 2–15 units (Meulengracht method) after injection. Least pronounced were the effects in cases of chronic hepatitis; in mech. types of jaundice no changes took place. G. M. Kosolapoff

1-1

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

EVZEROVA, F. K.

AID - P-76

Subject : USSR/Engineering

Card : 1/1

Authors : Alenchikov, S. I., Eng., and Evzerova, F. K., Eng. Moscow

Title : Quality of Steam for Uniflow Separating Boilers

Periodical : Izv. V.T.I., v. 21, #3, 17-18, Mr 1952

Abstract : Different methods of washing salt from steam in conventional and uniflow boilers are discussed. The salt concentration in water during evaporation is expressed with differential equations. 2 charts.

Institution : Moscow Inst. of Power Engineering im. Molotov (MEI), Bureau of Uniflow Boiler Construction

Submitted : October 5, 1951

YEVZEROVA, F. K.

AID P - 4378

Subject : USSR/Power Engineering

Card 1/1 Pub. 110 a - 4/17

Authors : Alenchikov, S. I. and F. K. Yevzerova, Engs. Moscow Branch of the Central Scientific Research Institute for Boilers and Turbines and the All-Union Heat Engineering Institute.

Title : Salt-concentrating device for testing of feed water and condensates.

Periodical : Teploenergetika, 5, 22-24, My 1956

Abstract : A new device for feed water concentration, and its design and operation are described. Reportedly this instrument makes possible a ten-fold concentration of liquid. One diagram, 3 tables.

Institution : ~~None~~ Section Central Research Inst., Boilers and turbines, Moscow

Submitted : No date

SOV/96-59-7-14/26

AUTHOR: Yevzerova, F.K., Engineer

TITLE: Continuous Control of the Quality of Feed-water and Condensate (Nepreryvnyy kontrol' kachestva pitatel'noy vody i kondensata)

PERIODICAL: Teploenergetika, 1959, Nr 7, pp 65-69 (USSR)

ABSTRACT: Steam and feed-water samples from high-pressure boilers must be considerably concentrated before continuous reliable quality control measurements can be made on them. A salt concentrator was proposed in 1947; the Moscow Power Institute Design was published in 1950 and the BPK instrument was developed in 1951 for continuous control of the quality of super-heated steam. One such instrument was installed on a once-through boiler at Regional Power Station Nr 18 of the Moscow Power System and gives about 24-fold concentration of the sample. The author, in collaboration with S.I. Alenchikov, developed a salt concentrator for feed-water samples, and the instrument was installed and tested at the same power station. The concentration factor was found to depend upon the heating-steam pressure; if this was raised from 4.7 to 4.9 atms the concentration factor increased from 7 to 11.5, which is obviously not good enough.

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Continuous Control of the Quality of Feed-water and Condensate

A simple analysis of the problem is given on the assumption that the sample is delivered at a constant rate, at a temperature of 100°C and pressure of 1 atm, and that the heating medium is dry saturated steam at constant pressure. Equation (1) is derived for this case and then M is defined as the product of the evaporator surface area and the heat-transfer coefficient divided by the rate of flow of sample. The relationship between the concentration factor and M is given in expression (3), where r is the latent heat of steam at 1 atm and the temperature difference is that between the saturation temperatures of the testing medium and the sample. Graphs of the concentration factor as a function of the pressure of the heating steam for various values of M are given in Figure 1. It will be seen that the greater the value of M, the greater the dependence of the concentration factor on the pressure of the heating steam. Graphs of the concentration factor as a function of the pressure of the heating steam for two evaporators in series, each with the same value of M, are shown in Figure 2. It will be seen that with two-stage evaporation a concentration factor of about 20 can

Continuous Control of the Quality of Feed-water and Condensate

be achieved and depends very little on the pressure of the heating steam. In practice the concentration factors of the BPK instrument are lower than the theoretical value because the conditions are not quite constant; in particular, the sample flow is constant only at the inlet to the first stage of evaporation. Certain changes were made in the BPK salt concentrator to increase its stability. A diagram of the modified BPK-VTI instrument is given in Figure 3 (VTI signifies All-Union Thermo-Technical Institute). A temperature stabiliser is installed before the first stage; it consists of a heat exchanger with the sample flowing in the inner tube and steam at atmospheric pressure in the outer. Special arrangements are made to ensure constant rate of flow in the second stage. The operation of the instrument is explained. As the evaporative surfaces are the same in the BPK and the BPK-VTI salt concentrators, it was possible to compare them. Test results of the concentration factor as a function of the heating-steam pressure for the BPK-VTI instrument are plotted in Figure 4 and the corresponding line for the old

Continuous Control of the Quality of Feed-water and Condensate

instrument is chain-dotted. The new salt concentrator is more stable than the old and when heating-steam pressure is raised from 4.7 to 4.9 atm the concentration factor increases only from 9 to 10.5. In addition to concentrating the samples, the instrument also de-gasses them effectively, as will be seen from the tabulated data; this is of importance in making electrical measurements on the samples. The ten-fold concentration given by this equipment is hardly sufficient for modern requirements, and it would be better to have a factor of about 20. By appropriate selection of the concentration factor in each of the two stages a salt concentrator was developed with a factor of 20. It requires about 25 kg/hr of sample and uses heating-steam at a pressure of about 13 atm. With only slight complication this BPK-VTI salt concentrator can be used for both steam and concentrate at any temperature and pressure. The additional parts are an inlet heat-exchanger and expander. The sample of steam or water

Continuous Control of the Quality of Feed-water and Condensate

passes to the inner tube of the inlet heat-exchanger, whose outer tube carries wet steam from the temperature stabiliser. Thus the sample reaching the inlet heat-exchanger is always at a temperature of 100°C. Because this instrument has a stable concentration factor it is recommended for the continuous control of individual contaminants in steam and condensate.
There are 4 figures, 1 table and 5 Soviet references.

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

Card 5/5

YEVZEROVA, Ye.K. ; SHINYANSKAYA, Ts.Ya.

Treatment of infectious diseases of the nervous system by massive doses of vitamin B_1 and the peculiarity of its action on pain syndrome. Vrachebnoe delo 27, 587-92 (columns, not pp.) '47.
(CA 47 no.21:11537 '53)

YEVZEROVA, E. K.

Yevzerova, E. K. - "The primary and reflex syndrome of the lower chest and sacral section of the boundary trunk of the sympathetic nervous system", Sov. vracheb. sbornik, Issue 13, 1949, p. 9-12.

SO: U-4329, 19 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 21, 1949).

POLONSKIY, M.S.; ZHURAVIN, M.A.; IADYZHENSKIY, Ye.B.; PINSKER, B.I.; ZUBOV, V.G.; SHESTERIKOV, A.A.; YAKUN', F.V.; KRYNITSA, M.N.; AREF'YEV, B.A.; YEVZIKOV, I.I., starshiy stroitel' sudov; PAVLENKO, I.F.; YEKOVLEV, B.M., inzh.; MARKOV, A.P., inzh.

Readers' response to the article by engineer M.A. Daikhes entitled "Method of mounting the main engines with minor deformations of the foundation frame and the cranshaft". Sudostroenie 30 no.10:57-66 O '64. (MIRA 17:12)

1. Gruppovoy inzh.-mekhanik SSKh parokhodstva "Kaspar" (for Zubov). 2. Inzh.-inspektor Registra SSSR (for Yakun'). 3. Glavnyy inzh.-inspektor inspektsii Registra SSSR Baltiyskogo basseyna (for Aref'-yev). 4. Starshiy mekhanik teplokhoda "Tadzhikistan" (for Pavlenko).

YEVZIKOVA, N.Z.

Methods of projecting a crystal structure on the plane (hkl).
Zap. Vses. min. ob-va 93 no.3:266-272 '64.
(MIRA 18:3)

YEVZIKOVA, N.Z.

Principles of the structural and geometric analysis of crystal faces. Zap.Vses.min.ob-va 94 no.2:129-142 '65. (MIRA 18:5)

1. Nauchno-issledovatel'skiy institut geologii Arktiki, Leningrad.

YEVZIKOVA, N.Z.

Inclusions of alkali akermanite from the Odikhincha deposit (northern part of Krasnoyarsk Territory). Zap. Vses. min. ob-va 92 no.3:322-327 '63. (MIRA 17:9)

1. Nauchno-issledovatel'skiy institut geologii Arktiki.

RUBINOVICH, R.S.; YEVZIKOVA, N.A.

Use of infrared spectroscopy for the study of cebollite. Tsv. zap. NIIGA. Reg.geol. no.3:210-225 '64. (MIRA 18:10)

YEVZIKOVA, N.Z.

YEVZIKOVA, N.Z.

Pegmatites of basic rocks and the origination mechanism of graphic feldspar and quarts structure in them. Zap.Vsos.min.ob-va 84 no.3: 321-331 '55. (MLRA 8:11)

(Pegmatites)

YEVZIKOVA, N.Z.

Remarks on V.F. Barabanov's article "Fluorite from the Bukuka wolframit deposit (eastern Transbaikalia). Zap. Vses. min. ob-va 88 no.5:612-614 '59. (MIRA 13:2)
(Bukuka region (Transbaikalia)--Flurite crystals))

YEVZIKOVA, N.Z.

Oriented growth and habitus change of pyrochlore crystals. Zap. Vses. min. ob-va 89 no.5:555-560 '60. (MIRA 13:10)

1. Institut geologii Arktiki, Leningrad.
(Pyrochlore crystals)

BOGDANOV, I.V.; YEVZLIN, L.M.; CHUDAKOV, V.S.

Units for drying and moisturing leather. Leg. prom. 18 no.8:12-15 Ag '58. (MIRA 11:9)
(Leather--Machinery)

BOGDANOV, I.; YEVZLIN, L.; CHUDAKOV, V.

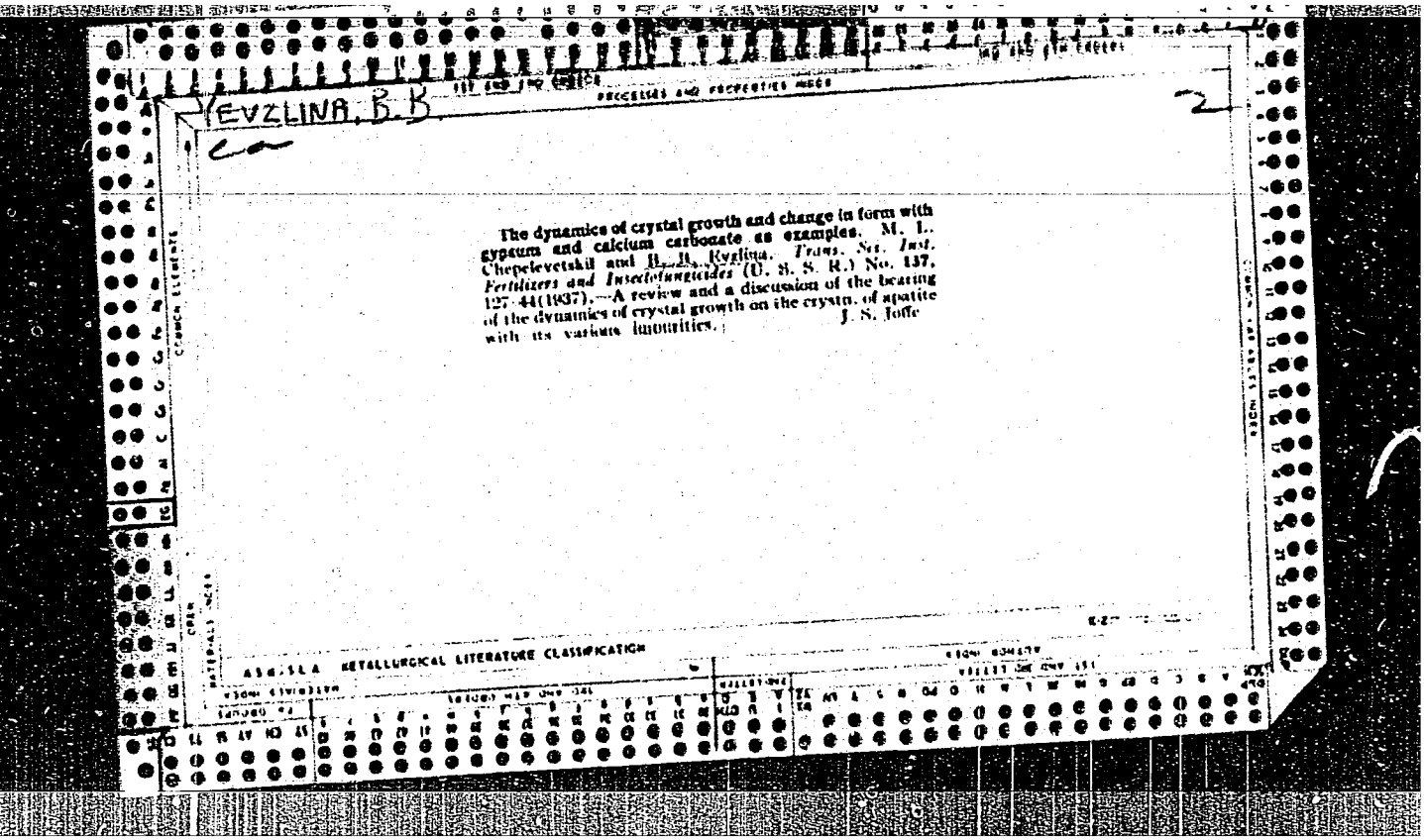
On the question of moistening stiff leathers before rolling. Kozh.-obuv.prom. no.6:40-3 of cover. Je '59. (MIRA 12:9)
(Leather)

BOGDANOV, I.V.; YEVZLIN, L.M.

Belt conveyor dryers for paperboard. Bum.prom. 38 no.1:27-28 Ja '63. (MIRA 16:2)

1. Gosudarstvennyy proyektnyy institut predpriyatiy legkoy promyshlennosti Moskovskogo gorodskogo soveta narodnogo khozyaystva.

(Drying apparatus) (Paperboard)



EVZLINA, B. B.

Ca

2

The dynamics of crystal growth and change in form with gypsum and calcium carbonate as examples. M. L. Chepelevetskii and B. B. Evzlina. *Trans. Sci. Inst. Fertilizers and Insectofungicides* (U. S. S. R.) No. 137, 127–44(1937).—A review and a discussion of the bearing of the dynamics of crystal growth on the crystn. of apatite with its various impurities. J. S. Joffe

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

YEVZLINA, B. B.

"Titration by Maximums Trubidity with a Photelectric Colorimeter. II Determinations of Sulfate Iron in Phosphate Solutions," M. L. Chepelevetskiy, S. S. Rubinova, and B. B. Evzlina, Zavod Lab XI, pp 783-7 (1945) (SEE: Inst. Insect/Fung/ in Ya. V. Sanchez)

SO: U-237/49, 8 April 1949

YEVZLINA, B.B.

AID P - 3488

Subject : USSR/Chemistry

Card 1/1 Pub. 152 - 3/21

Authors : Postnikov, N. N., B. B. Yevzlina, and O. V. Vasil'yeva

Title : Comparative reducibility of synthetic and natural calcium phosphates

Periodical : Zhur. prikl. khim., 28, 6, 579-584, 1955

Abstract : The experiments were carried out in a special furnace (UMG-type), a drawing of which is given. The composition of phosphorite and apatite ores as well as that of the synthetic and natural phosphates used in the experiments is given. The difference in the reducibility of the calcium phosphate and apatite groups, is ascribed to the difference in their composition. Three tables, 5 diagrams, 11 references, all Russian (1927-1951).

Institution : None

Submitted : F 20, 1953

POSTNIKOV, N.N.; FRENKEL', M.G.; YEVZLINA, B.B.; SMIRNOV, A.I.; PLOTNIKOVA, V.I.

Composition and properties of defluorinated phosphates. Zhur. prikl. khim. 31 no.10:1453-1460 O '58. (MIRA 12:1)
(Phosphates)

YEVZLINA, B.B.; SKVORTSOVA, T.Ya.

Determining calcium in slag from phosphorus-producing furnaces by the trilonometric method. [Trudy] NIUIF no.164:47-48 '59. (MIRA 15:5)

(Calcium--Analysis) (Acetic acid)

YEVZOVICH, B. Ye.

Yevzovich, B. Ye. "On the history of the development of hypothalamus(supraoptic and paraventricular substances)" Sbornik nauch, rabot, posvyashch, 70- letiyu prof. Seppa, Moscow, 1948, p. 48-57

SO: U-3264, 10 April 1953, (Letopis 'Zhurnal 'nykh Statey, No. 3, 1949)

YEVZOVICH, V., inzh.

Effect of cement interlayers on the strength of the bond between repair materials and the tire. Avt.transp. 37 no.11: 27-30 N '59. (MIRA 13:2)
(Automobiles--Tires)

YEVZOVICH, V., inzh.

New state standards for materials used for the repair of tires.
Avt. transp. 38 no. 5:20-21 My '60. (MIRA 14:2)
(Tires, Rubber—Maintenance and repair)

YEVZOVICH, V., inzh.

Vulcanizing locally damaged tires by means of a two-sided heating. (MIRA 14:10)
Avt.transp. 39 no.9:23-24 S '61.
(Vulcanization)

KOVAL'CHUK, V.P., kandidat tekhnicheskikh nauk; YEVZOVICH, V.Ye., starshiy inzhener; GALAKTIONOVA, Ye.N., tekhnicheskiy redaktor

[The repair of automobile tires in foreign countries] Remont avtomobil'nykh shin za rubezhom. Moskva, Nauchno-tekhn. izd-vo avtotransp.lit-ry. Pt.1. 1956. 33 p. (MLRA 10:3)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut Avtomobil'nogo transporta. 2. Nachal'nik laboratorii avtomobil'nykh shin Nauchno-issledovatel'skogo instituta avtomobil'nogo transporta (for Koval'chuk)
(Automobiles--Tires--Repairing)

YEVZOVICH, Viktor Yevseyevich; BODRILLIN, A.P., red.; NIKOLAYEVA, L.N., tekhn.red.

[Effect of glue films on the quality of tire repairs] Vliianie kleevykh prosloek na kachestvo remonta shin. Moskva, Avtotransizdat, 1960. 56 p. (MIRA 13:10)
(Automobiles--Tires--Maintenance and repair)

YEVZOVICH, Viktor Ivseyevich; GRINBERG, P.I., red.; GORYACHKINA, R.A., tekhn. red.

[Retreading motor-vehicle tires] Vosstanovlenie protektorov avtomobil'nykh shin. Moskva, Avtotransizdat, 1963. 84 p. (MIRA 16:12)

(Tires, Rubber--Retreading and recapping)

YEVZERIKHIN, E.

Experience in using impulse lamps. Sov.foto 17 no.1:33-36 Ja '57. (MLRA 10:7)

(Photography, Flash-light--Apparatus and supplies)

YEY, B.N.; ALAKHVERDYANTS, S.A.; MAYOROVA, L.A.

Role of vegetables and fruits in the epidemiology of geohelminthiasis under climatic conditions prevailing in Ashkhabad. Zdrav. Turk. 3 no.4:26-27 Jl-Ag '59. (MIRA 13:2)

1. Iz Ashkhabadskogo instituta epidemiologii i gigiyeny (nauchnyy rukovoditel' - dotsent Ye.Ya. Gleyberman).
(ASHKHABAD--WORMS, INTESTINAL AND PARASITIC)
(FOOD, RAW--HYGIENIC ASPECTS)

YEY, B.N., starshiy nauchnyy sotrudnik; AGADZHANOV, R.A., mladshiy nauchnyy sotrudnik; ALAKHVERDYANTS, S.A., mladshiy nauchnyy sotrudnik; DASHKOVA, Ye.M., mladshiy nauchnyy sotrudnik; MAYOROVA, L.A., mladshiy nauchnyy sotrudnik; SHTOK, E.Sh., mladshiy nauchnyy sotrudnik

Experience in the sanitary and hygienic evaluation of agricultural sewage farms in Ashkhabad. Gig. i san. 25 no. 12:18-20 D '60.
(MIRA 14:2)

1. Iz Ashkhabadskogo instituta epidemiologii i gigiyeny.
(SOIL MICRO-ORGANISMS) (SEWAGE IRRIGATION)

YEY, B.N.; ALAKHVERDYANTS, S.A.; KARIMOV, Z.M.

Improving the biological method of applying predatory helminthophagous fungi in ancylostomiasis. Izv. AN Turk. SSR. Ser. biol. nauk no.1:70-72 '61. (MIRA 14:8)

1. Ashkhabadskiy institut epidemiologii i gigiyeny.
(HOOKWORM DISEASE) (FUNGI, PREDATORY)

ALAKHVERDYANTS, S.A.; YEY, B.N.; MAYOROVA, L.A.

Sanitary and helminthological evaluation of vegetables, greens, and fruits under the climatic conditions of Ashkhabad. Med. paraz.i paraz.bol. no.3:288-289 '61. (MIRA 14:9)

1. Iz Ashkhabadskogo instituta epidemiologii i gigiyeny (dir. Ye.S. Popova).
(ASHKHABAD—PRODUCE TRADE—HYGIENIC ASPECTS)
(ASHKHABAD—WORMS, INTESTINAL AND PARASITIC)

MESHCHERINA, Ye.M. (Belova); YEY, B.N.; KARIMOV, Z.M.

New foci of visceral leishmaniasis in Mary Province of the Turkmen S.S.R. Med.paraz.i paraz.bol. no.5:597-599 '61. (MIRA 14:10)

1. Iz Ashkhabadskogo instituta epidemiologii i gigiyeny Ministerstva zdravookhraneniya Turkmenskoy SSR (dir. instituta Ye.S. Popova).

(MARY PROVINCE--KALA-AZAR)

MESHCHERINA, Ye.M.; YEY, B.N.; KARIMOV, Z.M.

Some data on internal leishmaniasis in Mary Province. Zdrav. Turk. 5 no.1:15-17 Ja-F '61. (MIRA 14:6)

1. Iz Ashkhabadskogo instituta epidemiologii i gigiyeny (dir. - dotsent Ye.S.Popova).
(MARY PROVINCE--KALA-AZAR)

YEY, B.N.; ALAKHVERDYANTS, S.A.; MAYOROVA, L.A.

Epidemiology of ascariasis in Ashkhabad. Zdrav. Turk. 5 no.6:12-14 N-D '61. (MIRA 15:2)

1. Iz Ashkhabadskogo instituta epidemiologii i gigiyeny (dir. - dotsent Ye.S.Popova).
(ASHKHABAD--ASCARIDS AND ASCARIASIS)

YEY, B.N.; ALAKHVERDYANTS, S.A.

Preparations with spores of predatory fungi destructive to helminths for controlling the larvae of pathogenic nematodes. Izv.AN Turk. SSR.Ser.biol.nauk no.4:81-83 '62. (MIRA 15:9)

1. Ashkhabadskiy institut epidemiologii i gigiyeny.
(NEMATODA--BIOLOGICAL CONTROL) (FUNGI,PREDATORY)

MAYOROVA, L.A.; ALAKHVERDYAN, S.A.; YEY, B.N.

Use of naphthamon in the treatment of ancylostomiasis.
Zdrav. Turk. 7 no.4:32-33 Ap'63. (MIRA 16:6)

1. Iz Ashkabadskogo instituta epidemiologii i gigiyeny (dir. dotsent Ye.S.Popova).
(ANTHELMINTICS) (HOOKWORMS)

STAVROV, S.N., kand. khim. nauk; YEYDINOVA, Ye.M. [Eidinova, E.M.]

Preparation of magnesium chloride from magnesium gypsum. Khim. prom. [Ukr.] no.3:76-78 Jl-S '63. (MIRA 17:8)

1. Krymskiy filial Nauchno-issledovatel'skogo instituta stroitel'nykh materialov Akademii stroitel'stva i arkhitektury UkrSSR.

ACC NR: AP6033257 SOURCE CODE: UR/0109/66/011/010/1837/1845

AUTHOR: Yeyedlichka, M.; Vilim, P.

ORG: Research Institute of Vacuum Electronics, Prague (Issledovatel'skiy institut vakuumnoy elektroniki)

TITLE: A semitransparent antimony-rubidium-cesium photocathode

SOURCE: Radiotekhnika i elektronika, v. 11, no. 10, 1966, 1837-1845

TOPIC TAGS: photocathode, photoelectric emission, alkali cell, alkali metal oxide, semiconducting film, antimony, rubidium, cesium

ABSTRACT: An Sb-Rb-Cs oxidized two-alkali photocathode has been developed at the Research Institute of Vacuum Electronics in Prague. Parameters of the cathode are as follows: average integral sensitivity, 60—80 μa/lm; maximum sensitivity, 125 μa/lm; maximum spectral sensitivity, 480—500 nm; long-wave boundary, in the 750 nm region; quantum efficiency in the 600-nm region, up to 0.08 electron/quant (this value approaches that obtained for an Sb-Na-K-Cs type three-alkali photocathode; photoelectric work function, ∿1.65 ev; temperature-dependent thermoelectric work function, 1.25 ev. Width of forbidden zone according to optical measurements, 1.4 ev and with thermal excitation, 1.3 ev; thermoelectronic emission, ∿8 x 10^{-5} amp/cm^2 at 20°C; specific resistance of the photocathode at room-temperature ∿300 ohm/cm^2. The acceptors level with an activation energy of 0.45 ev is in the forbidden zone. The authors express their gratitude to Mishkovskaya for her cooperation

Card 1/2

ACC NR: AP6033257

in the measurements and for the translation of the text, and to Kalinovaya for the calculations and analysis of measurement results. Orig. art. has: 9 figures and 2 formulas.

SUB CODE: 09, 20/ SUBM DATE: 28Oct65/ ORIG REF: 002/ OTH REF: 005/
SOV REF: 002/

Card 2/2

L 19327-63 EWT(1)/EWG(k)/FCC(w)/BDS/EEC-2/ES(v) AFFTC/ASD/ESD-3/APGC/SSD
Pz-4/Pe-4 JHB/GW

ACCESSION NR: AR3002046 S/0269/63/000/005/0055/0055

SOURCE: RZh. Astronomiya. Otdel'nyy vypusk. Abs. 5.51.459 30 B

AUTHOR: Yevgenson, H. S.; Mandrykina, T. L.

TITLE: A new type of solar and heliogeophysical forecasts

CITED SOURCE: Visnyk L'vivs'k. un-tu. Ser. fiz., no. 1(8), 1962, 88-89

TOPIC TAGS: solar fluctuation, solar activity prediction

TRANSLATION: On the basis of a fluctuation analysis made earlier by these authors, and a study of the character of fluctuations in solar activity, the authors now express opinions on the possibility of predicting the fluctuational course of solar activity and solar geoactivity. There is a bibliography of 5 items.

DATE ACQ: 30May63 SUB CODE: AI ENCL: 00

Card 1/1

T 6388-66

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 16

TOPIC TAGS: pyridine, aldehyde, nitrile

ABSTRACT: This Author's Certificate introduces a method for producing 3-pyridine al-

Card 1/1

YURENKOV, V.D., kand. tekhn. nauk; YDYUN, V.I., inzh.

Increase in the switching capability of separators and disconnectors with 35 - 220 kv. ratings. Elek. sta. 35 no.5:46-53 My '64. (MIRA 17:8)

NYUKOV, Ye.S., kand.tekhn.nauk; YEYL'MAN, L.S., inzh.

Manufacture of electric cables with magnesian insulation. Vest. elektroprom. 34 no.4:76-78 Ap '63. (MIRA 16:10)

L 36061-66 EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/HW/JH

ACC NR: AP6007780 (N) SOURCE CODE: UR/0136/66/000/002/0071/0074

49
43
B

AUTHOR: Yeyl'man, L. S.

ORG: none

TITLE: Nature of the deformation of metals during the drawing of circular bimetal rods

SOURCE: Tsvetnyye metally, no. 2, 1966, 71-74

TOPIC TAGS: copper, nickel, aluminum, metal drawing, metal deformation, bimetal/ /M1 copper, NP2 nickel, AV000 aluminum

ABSTRACT: Since the drawing of a bimetal rod involves the simultaneous deformation of two metals with different mechanical properties, there arises the question of whether the ratio between the cross sectional areas of the core and sheath is not altered by this process. To clarify this question, the authors performed a large number of experimental measurements of the diameter of sheath and core, 5 mm in front of the area of deformation and 5 mm beyond that area, before and after the drawing of a Cu-Ni soft bimetal wire of 1.0-mm diameter which in a single drawing pass was stretched to the diameter of 0.85 mm. The measurements were correct to ± 1 μ. It was thus found that the diameter ratio between sheath and core before drawing averages 0.8025 and after drawing, 0.8091. The findings were statistically analyzed (Student test) and it was thus established that this difference is not significant and it is rather attributable to experimental error. After this, the effect of such a constancy of the ratio between

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L 36061-66

ACC NR: AP6007780

the components (M1 copper sheath and NP2 nickel core as well as AV000 aluminum core, aluminum being a softer material than the sheath) of a bimetal rod was investigated with the aid of a series of transverse lines plotted on the sheath and core. The resultant flow pattern of the metals (Figs. 1, 2) is due to the fact that the softer

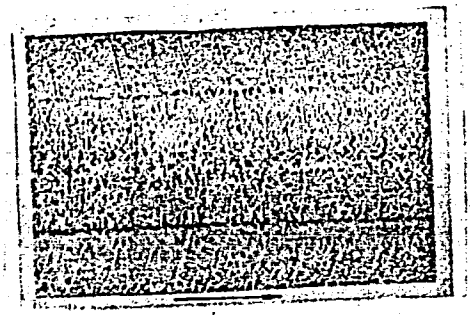

Fig. 1. Photograph of change in vertical lines plotted on a soft Cu-Ni bimetal rod when drawn from a diameter of 7.0 mm to a diameter of 5.0 mm.

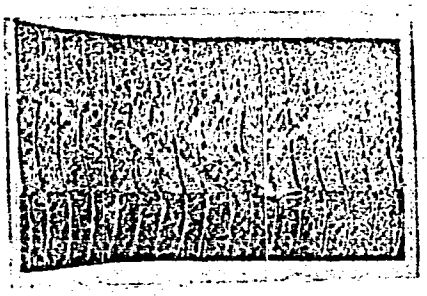

Fig. 2. Photograph of change in transverse lines plotted on a soft Cu-Al bimetal rod when drawn from a diameter of 7.0 mm to a diameter of 5.0 mm.

Card 2/4

metal gets stretched somewhat farther than the harder metal, but since the ratio between the metals remains constant, their interface in the area of deformation has the shape of a curve running in a fixed direction (Fig. 3). As a result, if the sheath is

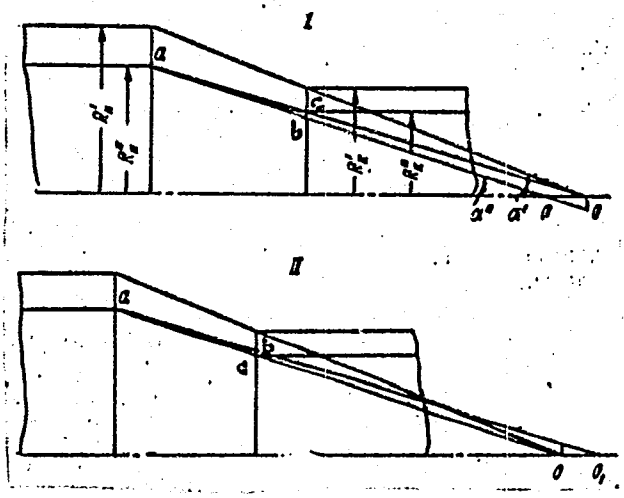

Fig. 3. Diagram of area of deformation (ac -- metal interface; aco_1 -- tangent to the metal interface):

I - sheath harder than core;
II - sheath softer than core

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ACC NR: AP6007780

softer than the core, the accumulation of the sheath material to the rear of area of deformation ultimately causes the bulging of the sheath. If, on the other hand, the sheath is harder than the core, the accumulation of the core material in the front of the area of deformation causes the sheath to split on emerging from the area of deformation. Orig. art. has: 3 figures, 1 table and 3 formulas.

SUB CODE: 13, 11/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 001

Card 4/4 vmb

YEYNOR, O.L.

Method for plotting lithofacies and paleogeographical maps.
Nauk.zap.Kyiv.un. 16 no.14:65-77 '57. (MIRA 13:4)
(Paleogeography--Maps)

YEZAN, A. Ya.

Harvesting

Highly productive use of tractor-drawn combines in harvesting grain. Dost. sel'khoz. no. 7, 1952.

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

YEZDAKOV, D.

Samoletov, A., Uspenskiy, A., and Yezdakov, D. "A model poultry packing plant" (The Tomilino plant), Myas. industriya, 1949, No. 1, p. 47-50.

SO: U-3042, 11 March 53, (Letopis'nykh, Statey, No. 10, 1949).

YEZDAKOV, K.Ye., inzh.; LANTSBURG, Ya.B., inzh.; RYAZANTSEV, K.G., spets. red.; AZRILIYANT, Ya.M., red. izd-va; GILENSON, P.G., tekhn. red.

[Collection of official materials on the protection of labor in construction work] Sbornik ofitsial'nykh materialov po okhrane truda na stroitel'stve. Moskva, Gos. izd-vo lit-ry po stroit. i arkhit. i stroit. materialam, 1961. 701 p. (MIRA 14:6)

1. Soyuz rabochikh stroitel'stva i promyshlennosti stroitel'nykh materialov. TSentral'nyy komitet.
(Construction industry—Safety measures)

YEZDAKOV, N. V., Cand Agr Sci -- (diss) "Effectiveness of the feeding of waste products of the antibiotic industry in the fattening of ~~swine~~ hogs." Mos, [1957]. 13 pp (All-Union Sci Res Inst of Animal Husbandry, Department of ~~Feeding Nutrition~~ the Feeding of Agricultural Animals) (KL, 2-58, 114)

YEZDAKOV, N.V.

USSR/Farm Animals. The Swine Q-4

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 50055

Author : Yezdekov N.V.
Inst : [redacted]
Title : Utilizing Waste of Antibiotic Production for the Fattening of Swine

Orig Pub : Svinovodstvo, 1957, 39-42

Abstract : When biomycin and penicillin waste was fed to pigs in doses of 5 to 10 g daily for a period of 4 months, the qualities of meat and lard were improved (more protein contained in meat, higher caloric value of lard). Also, the digestibility of dry substances was increased by 3-5 percent, of protein by 4-5 percent, and of cellulose by 8-11 percent. Fodder productivity was increased, fattening time was shortened, and expenses for the animals' care and upkeep during fattening were lowered as well.

Card : 1/1

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YEZDAKOV, N.V

Q-2

USSR/Farm Animals. Swine.

Abs Jour: Ref Zhur - Biol., No. 22, 1958, 101183

Author : Yezdokov, N.V.

Inst : All-Union Scientific Research Institute of Animal Husbandry.

Title : Utilizing Antiobiotic Production Waste for Fattening of Swine.

Orig Pub: Byul. nauchno-tekhn. inform. Vses. n.-i. in-t zhivotnovodstva, 1958, No. 2(4) 22-26

Abstract: When 10 g of penicillin mycelium (pencillin production waste) per each kg of live weight was added to rations of pigs during fattening periods (4 months), increased average daily weight gains of 38 percent were produced. When 5g of the above-mentioned waste products were added, an 18 percent increase resulted.

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Q-2

Abs Jour: Ref Zhur - Biol., No. 22, 1958, 101183

When 10 g or 5 g of biomycin mycelium per each kg of live weight were added, [illegible] weight gains amounted to 59 and 50 percent, respectively, as compared to controls. Pigs receiving penicillin and biomycin mycelium were found to have better meat quality.

Card 2/2

YEZDAKOV, N.V.

Utilization of solid side-products in the chlortetracycline and penicillin industry for swine feeding. Antibiotiki 3 no.2:106-110 Mr-Ap '58. (MIRA 12:11)

1. Otdel kormleniya sel'skokhozyaystvennykh zhivotnykh Vsesoyuznogo nauchno-issledovatel'skogo instituta zhivotnovodstva.
(CHLORTETRACYCLINE, preparation of, solid side-products in swine feeding (Rus))
(PENICILLIN, preparation of same)
(SWINE, feeding with side-products in chlortetracycline & penicillin prod. (Rus))

YEVZIKOVA, N.Z.; MOSKALYUK, A.A.

Gas-liquid inclusions in the carbonates of carbonatites. (MIRA 17:12)
Dokl. AN SSSR 159 no.1:98-101 M '64.

1. Nauchno-issledovatel'skiy institut geologii Arktiki.
Predstavlena akademikom D.S. Korzhinskim.

YEZDAKOV O.D.

Q-2

USSR / Farm Animals. Cattle.

Abs Jour : Ref Zhur - Biol., No 14, 1958, No 64421

Author : Yezdakov, O. D.
Inst : All-Union Scientific Research Institute of Animal Husbandry
Title : Changes in the Carotene and Vitamin A Content of Milk and Butter in Relation to the Type of Feeding and Breeds of Animals.

Orig Pub : Byul. nauchno-tekhn. inform. Vses. n.-i. in-t zhivotnovodstva, 1957, No 1 (3), 48-50

Abstract : The highest content of vitamin A (A) and carotene (K) in the milk was in July, when the cows were fed vetch-oats mixture and clover. During the winter period, corn silage produced a more marked increase of A and K in the milk, as well as in the butter, as compared with sunflower silage. The milk of the Jersey cows and their crossbreeds had a considerably

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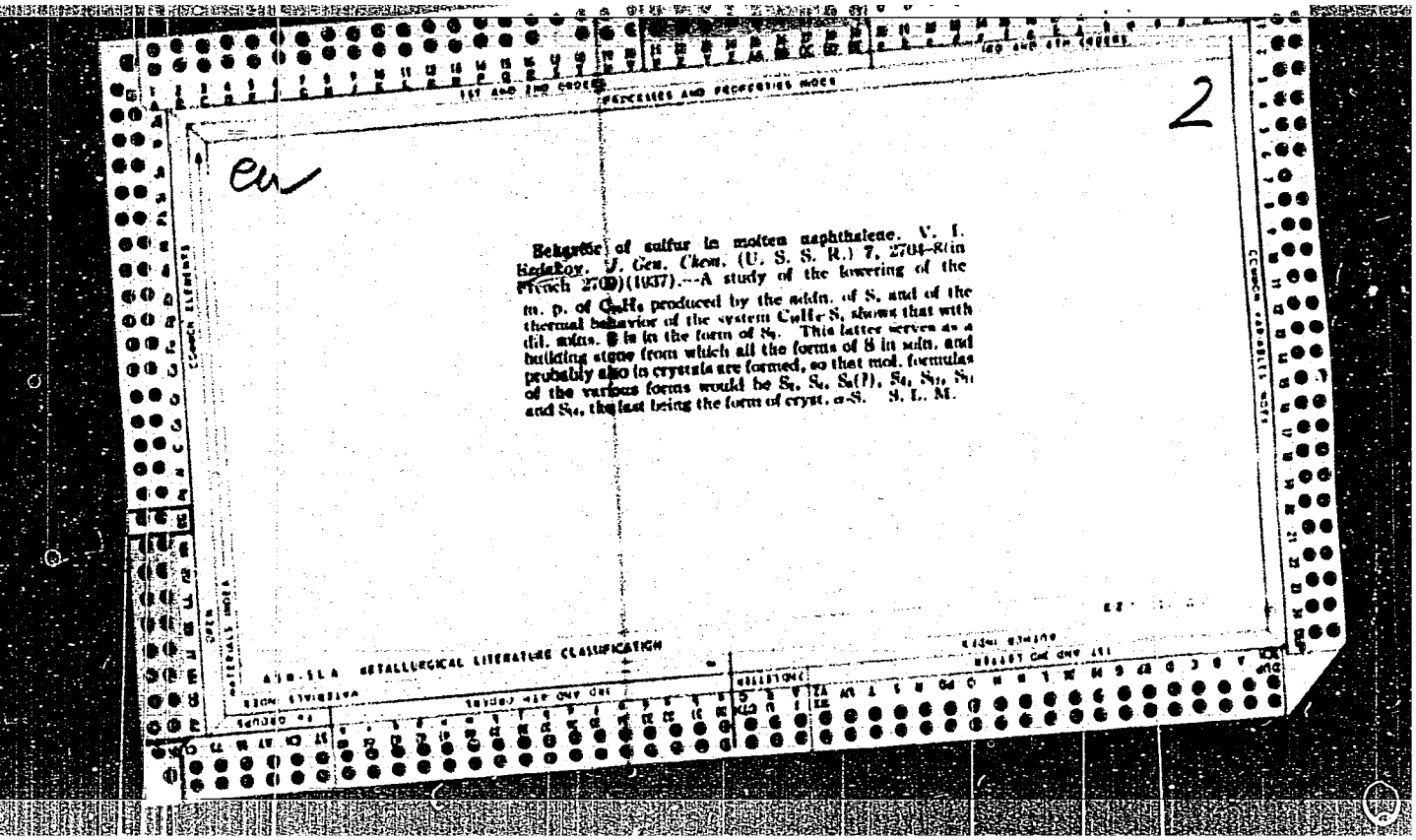
Q-2

USSR / Farm Animals. Cattle.

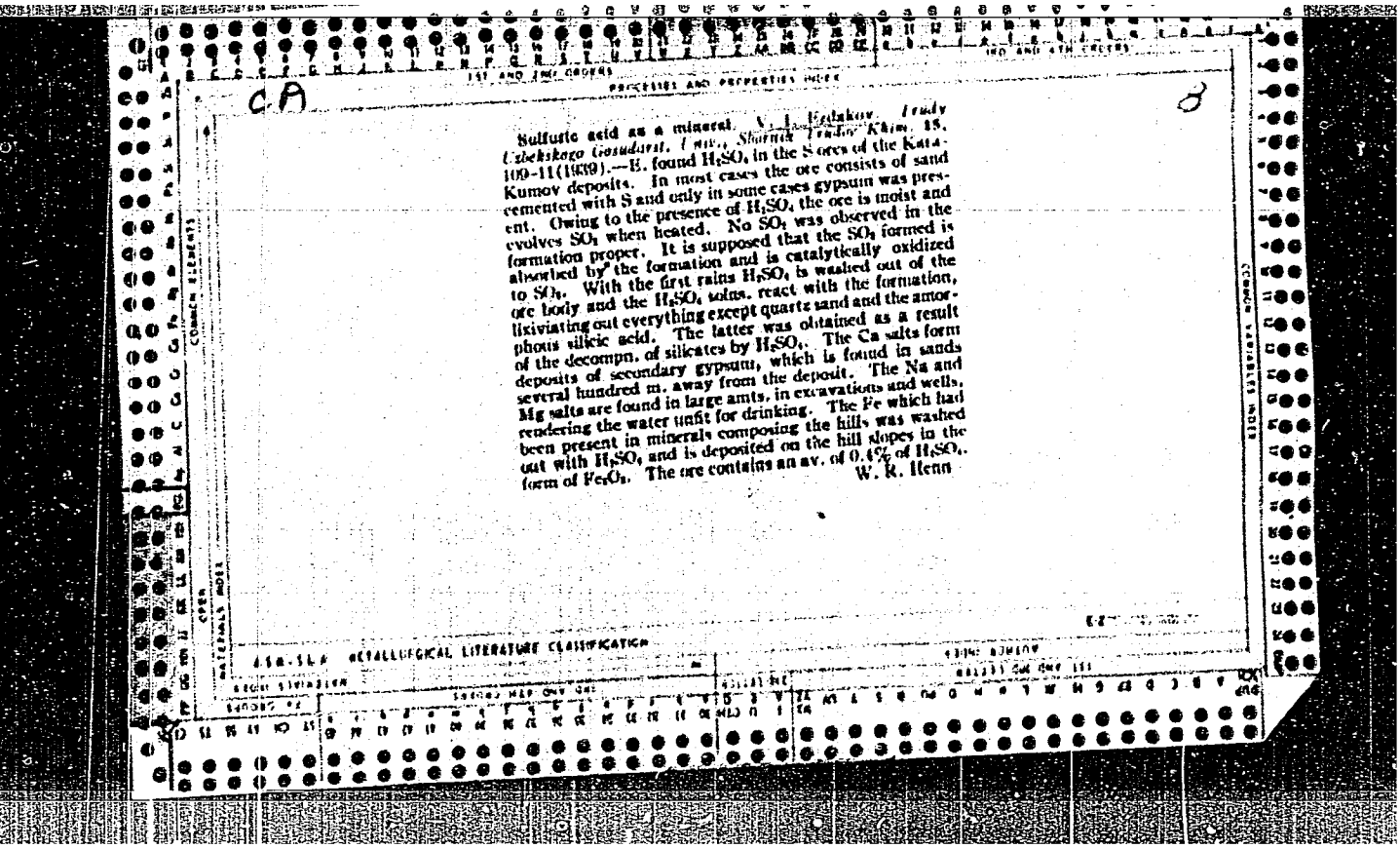
Abs Jour : Ref Zhur - Biol., No 14, 1958, No 64421

higher A and K content than the milk of the East Friesian cows during the stall management period. During the pasture period, this difference becomes less marked.

Card 2/2



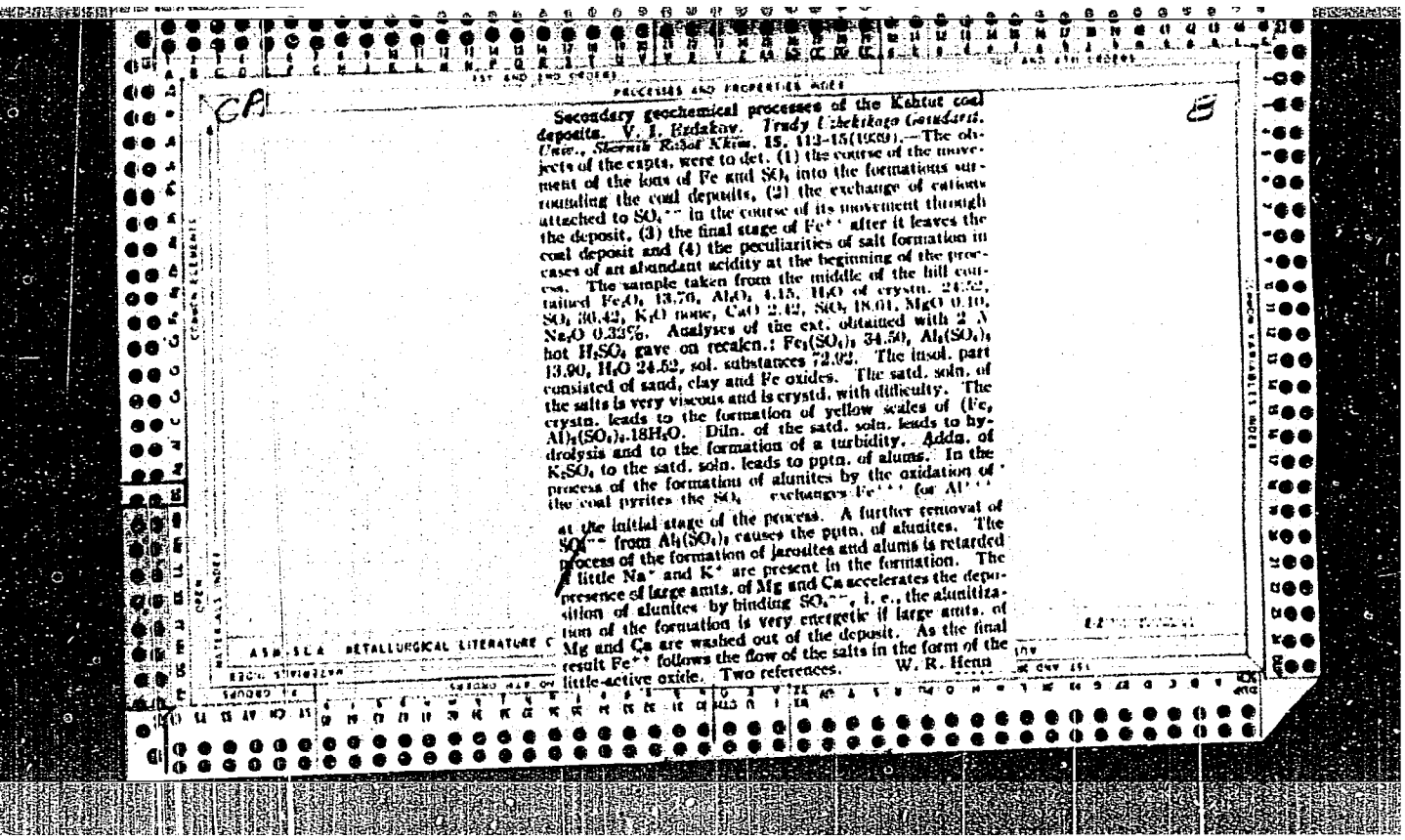
Behavior of sulfur in molten naphthalene. V. I. Kedakov. *J. Gen. Chem.* (U. S. S. R.) 7, 2704–8(in French 2709)(1937).—A study of the lowering of the m. p. of $C_{10}H_8$ produced by the addn. of S, and of the thermal behavior of the system $C_{10}H_8$–S, shows that with dil. solns. S is in the form of S_8. This latter serves as a building stone from which all the forms of S in soln. and probably also in crystals are formed, so that mol. formulas of the various forms would be S_8, S_8, $S_8(?)$, S_6, S_{10}, S_{12} and S_{∞}, the last being the form of cryst. α-S. S. L. M.



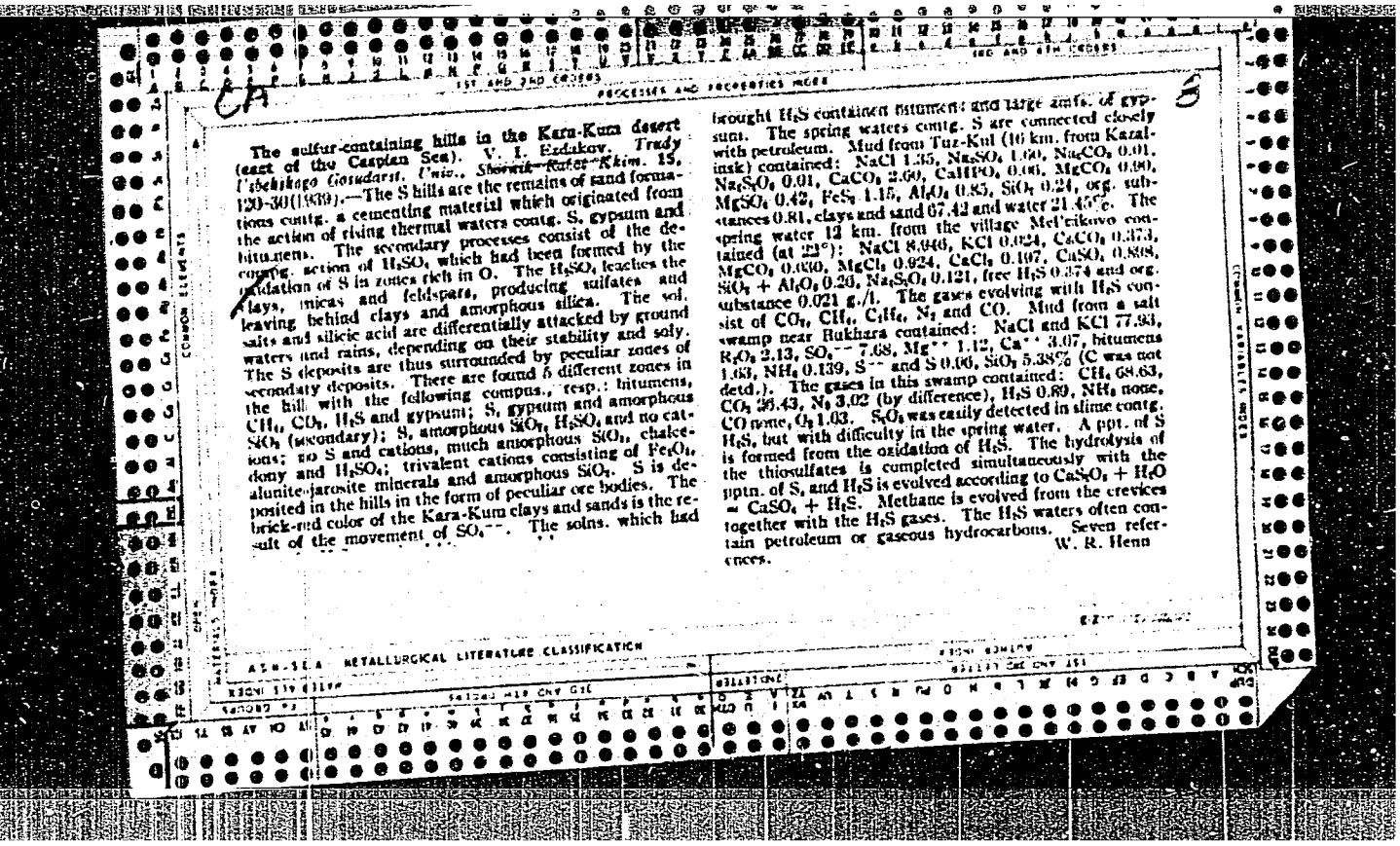
CA

Sulfuric acid as a mineral. V. I. Egiakov. *Trudy Uzbekskogo Gosudarst. Univ., Sbornik Trudov Khim.* 15, 109–11(1939).—E. found H_2SO_4 in the S ores of the Kara-Kumov deposits. In most cases the ore consists of sand cemented with S and only in some cases gypsum was present. Owing to the presence of H_2SO_4 the ore is moist and evolves SO_3 when heated. No SO_3 was observed in the formation proper. It is supposed that the SO_3 formed is absorbed by the formation and is catalytically oxidized to SO_3. With the first rains H_2SO_4 is washed out of the ore body and the H_2SO_4 solns. react with the formation, lixiviating out everything except quartz sand and the amorphous silicic acid. The latter was obtained as a result of the decompn. of silicates by H_2SO_4. The Ca salts form deposits of secondary gypsum, which is found in sands several hundred m. away from the deposit. The Na and Mg salts are found in large amts. in excavations and wells, rendering the water unfit for drinking. The Fe which had been present in minerals composing the hills was washed out with H_2SO_4 and is deposited on the hill slopes in the form of Fe_2O_3. The ore contains an av. of 0.4% of H_2SO_4.

W. R. Henn

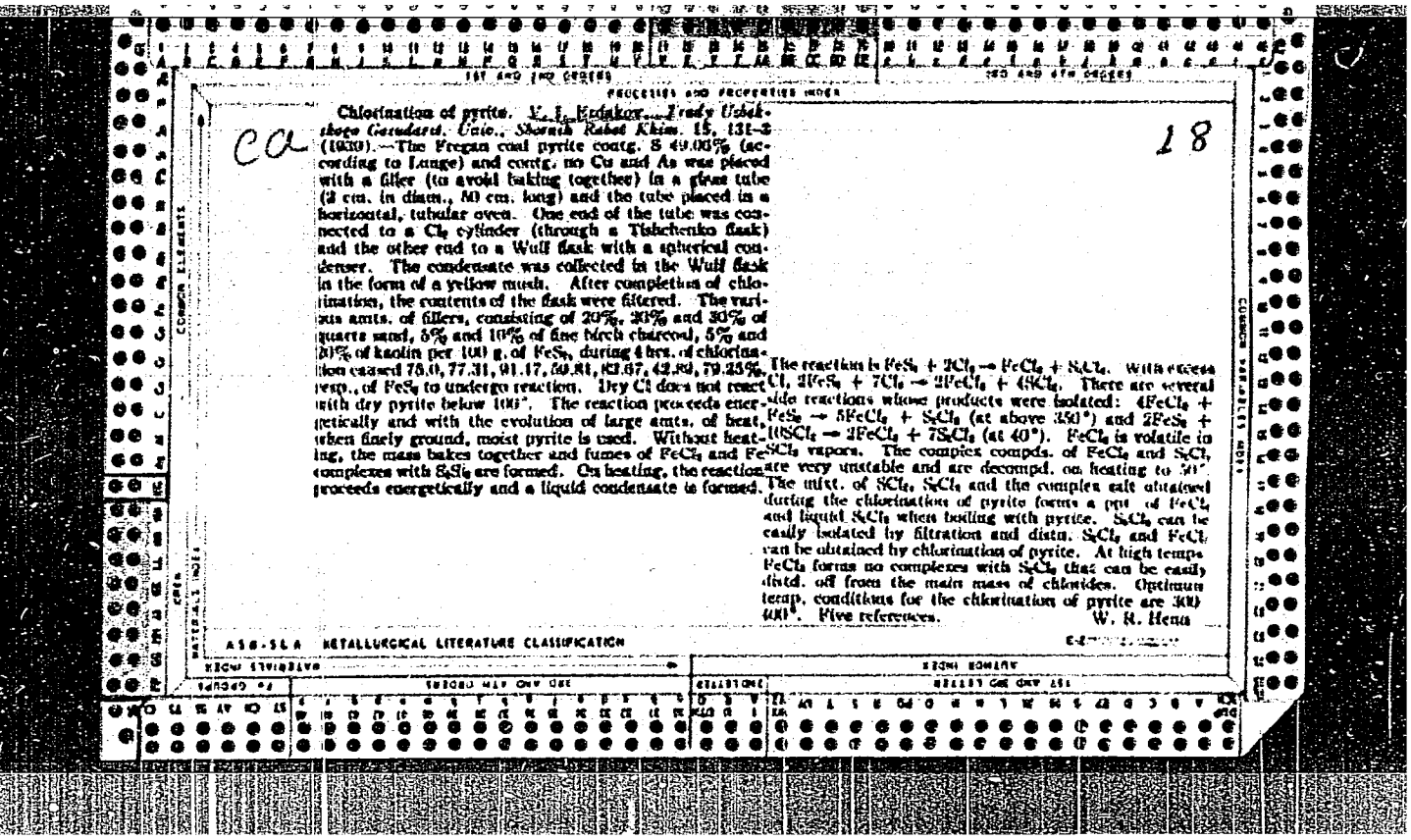


Secondary geochemical processes of the Kahtut coal deposits. V. I. Erdakov. *Trudy Chekitago Gosudarst. Univ., Sbornik Nauch Khim.* 15, 113-15(1959).—The objects of the expts. were to det. (1) the course of the movement of the ions of Fe and SO_4 into the formations surrounding the coal deposits, (2) the exchange of cations attached to SO_4^{--} in the course of its movement through the deposit, (3) the final stage of Fe^{++} after it leaves the coal deposit and (4) the peculiarities of salt formation in cases of an abundant acidity at the beginning of the processes. The sample taken from the middle of the hill contained Fe_2O_3 13.76, Al_2O_3 4.15, H_2O of crystn. 24.52, SO_3 30.42, K_2O none, CaO 2.42, SiO_2 18.01, MgO 0.10, Na_2O 0.33%. Analyses of the ext. obtained with 2 *N* hot H_2SO_4 gave on recalcn.: $Fe_2(SO_4)_3$ 34.50, $Al_2(SO_4)_3$ 13.90, H_2O 24.52, sol. substances 72.92. The insol. part consisted of sand, clay and Fe oxides. The satd. soln. of the salts is very viscous and is crystd. with difficulty. The crystn. leads to the formation of yellow scales of $(Fe, Al)_2(SO_4)_3 \cdot 18H_2O$. Diln. of the satd. soln. leads to hydrolysis and to the formation of a turbidity. Addn. of K_2SO_4 to the satd. soln. leads to pptn. of alums. In the process of the formation of alunites by the oxidation of the coal pyrites the SO_4 exchanges Fe^{+++} for Al^{+++} at the initial stage of the process. A further removal of SO_4^{--} from $Al_2(SO_4)_3$ causes the pptn. of alunites. The process of the formation of jarosites and alums is retarded if little Na^+ and K^+ are present in the formation. The presence of large amts. of Mg and Ca accelerates the deposition of alunites by binding SO_4^{--}, i. e., the alunitization of the formation is very energetic if large amts. of Mg and Ca are washed out of the deposit. As the final result Fe^{++} follows the flow of the salts in the form of the little-active oxide. Two references. — W. R. Hemp

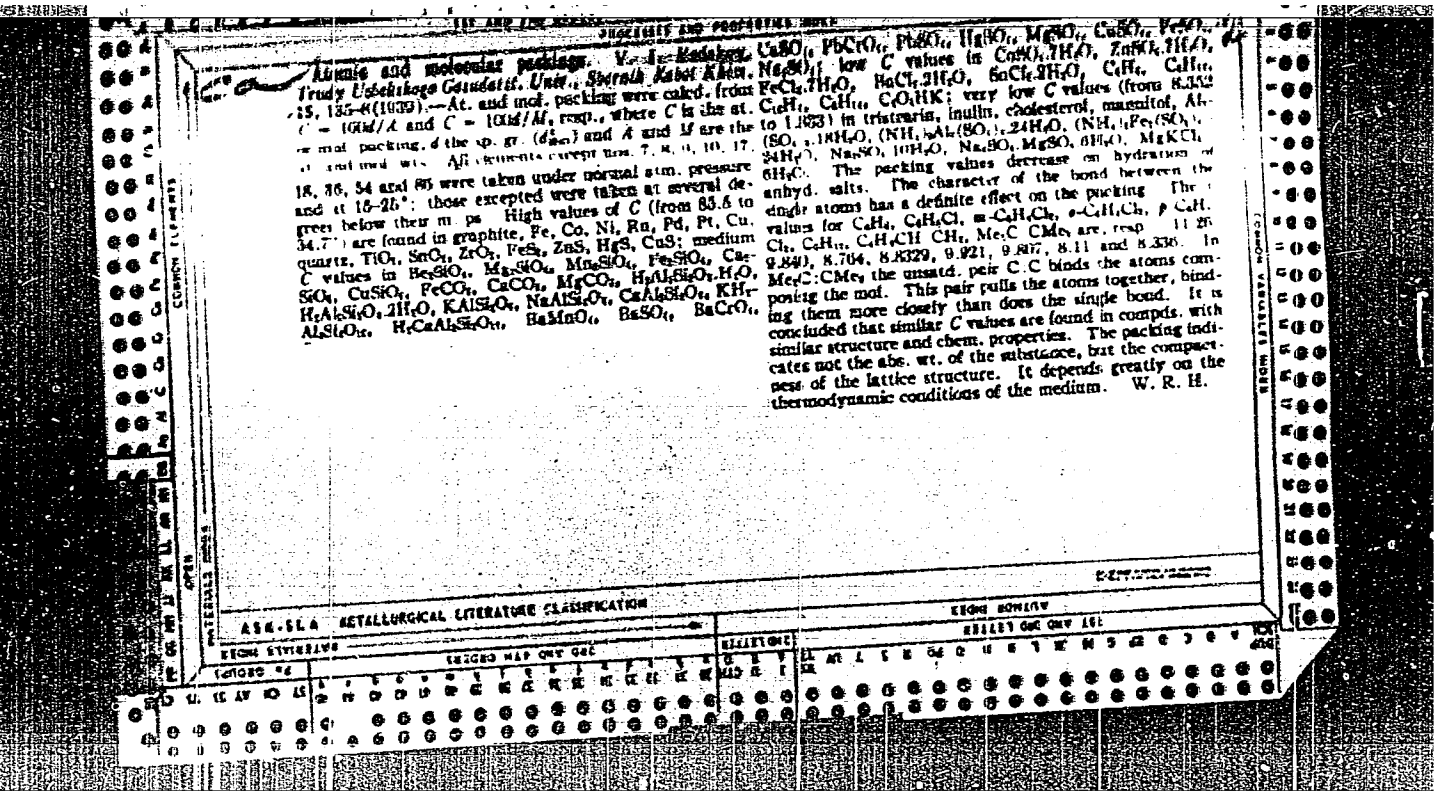


The sulfur-containing hills in the Kara-Kum desert (east of the Caspian Sea). V. I. Erdakov. *Trudy Uzbekskago Gosudarst. Univ., Sbornik Nauch. Rabot Khim.* 15, 129-30(1939).—The S hills are the remains of sand formations contg. a cementing material which originated from the action of rising thermal waters contg. S, gypsum and bitumens. The secondary processes consist of the decomp. action of H_2SO_4 which had been formed by the oxidation of S in zones rich in O. The H_2SO_4 leaches the clays, micas and feldspars, producing sulfates and leaving behind clays and amorphous silica. The sol. salts and silicic acid are differentially attacked by ground waters and rains, depending on their stability and solv. The S deposits are thus surrounded by peculiar zones of secondary deposits. There are found 5 different zones in the hill with the following compns., resp.: bitumens, CH_4, CO_2, H_2S and gypsum; S, gypsum and amorphous SiO_2 (secondary); S, amorphous SiO_2, H_2SO_4 and no cations; no S and cations, much amorphous SiO_2, chalcedony and H_2SO_4; trivalent cations consisting of Fe_2O_3, alunite-jarosite minerals and amorphous SiO_2. S is deposited in the hills in the form of peculiar ore bodies. The brick-red color of the Kara-Kum clays and sands is the result of the movement of SO_4^{--}. The solns. which had brought H_2S containing bitumens and large amts. of gypsum. The spring waters contg. S are connected closely with petroleum. Mud from Tuz-Kul (16 km. from Kazalinsk) contained: NaCl 1.35, Na_2SO_4 1.60, Na_2CO_3 0.01, $Na_2S_2O_3$ 0.01, $CaCO_3$ 2.60, $CaHPO_4$ 0.06, $MgCO_3$ 0.90, $MgSO_4$ 0.42, FeS_2 1.15, Al_2O_3 0.85, SiO_2 0.24, org. substances 0.81, clays and sand 67.42 and water 21.45%. The spring water 12 km. from the village Mel'nikovo contained (at 21°): NaCl 8.946, KCl 0.024, $CaCO_3$ 0.373, $MgCO_3$ 0.030, $MgCl_2$ 0.924, $CaCl_2$ 0.107, $CaSO_4$ 0.808, $SiO_2 + Al_2O_3$ 0.26, $Na_2S_2O_3$ 0.121, free H_2S 0.374 and org. substance 0.021 g./l. The gases evolving with H_2S consist of CO_2, CH_4, C_4H_{10}, N_2 and CO. Mud from a salt swamp near Bukhara contained: NaCl and KCl 77.93, R_2O_3 2.13, SO_4^{--} 7.68, Mg^{++} 1.12, Ca^{++} 3.07, bitumens 1.63, NH_4 0.139, S^{--} and S 0.06, SiO_2 5.38% (C was not detd.). The gases in this swamp contained: CH_4 68.63, CO_2 26.43, N_2 3.02 (by difference), H_2S 0.89, NH_3 none, CO none, O_2 1.03. S_2O_3 was easily detected in slime contg. H_2S, but with difficulty in the spring water. A ppt. of S is formed from the oxidation of H_2S. The hydrolysis of the thiosulfates is completed simultaneously with the ppt'n. of S, and H_2S is evolved according to $CaS_2O_3 + H_2O = CaSO_4 + H_2S$. Methane is evolved from the crevices together with the H_2S gases. The H_2S waters often contain petroleum or gaseous hydrocarbons. Seven references.

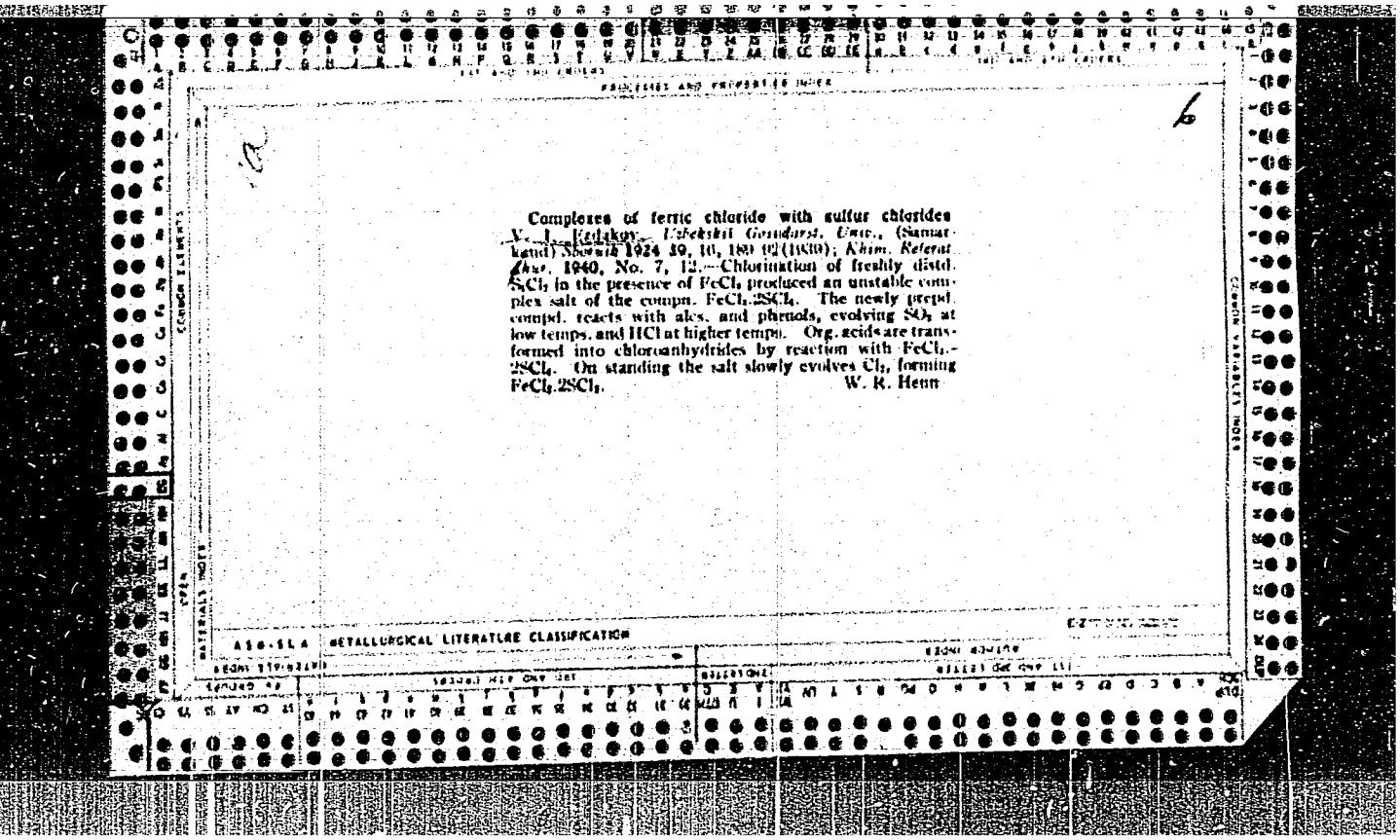
W. R. Henn



Chlorination of pyrite. V. I. Krinker. *Trudy Uzbekskogo Gosudarst. Univ., Sbornik Rabot Khim.* 15, 131–3 (1939).—The Pregan coal pyrite contg. S 49.00% (according to Lange) and contg. no Cu and As was placed with a filler (to avoid baking together) in a glass tube (3 cm. in diam., 80 cm. long) and the tube placed in a horizontal, tubular oven. One end of the tube was connected to a Cl_2 cylinder (through a Tishchenko flask) and the other end to a Wulf flask with a spherical condenser. The condensate was collected in the Wulf flask in the form of a yellow mush. After completion of chlorination, the contents of the flask were filtered. The various amts. of fillers, consisting of 20%, 30% and 30% of quartz sand, 5% and 10% of fine birch charcoal, 5% and 20% of kaolin per 100 g. of FeS_2, during 4 hrs. of chlorination caused 78.0, 77.31, 91.17, 59.81, 82.67, 42.89, 79.25% resp., of FeS_2 to undergo reaction. Dry Cl does not react with dry pyrite below 100°. The reaction proceeds energetically and with the evolution of large amts. of heat, when finely ground, moist pyrite is used. Without heating, the mass bakes together and fumes of $FeCl_3$ and Fe complexes with S_2Cl_2 are formed. On heating, the reaction proceeds energetically and a liquid condensate is formed. The reaction is $FeS_2 + 2Cl_2 \rightarrow FeCl_2 + S_2Cl_2$. With excess Cl, $2FeS_2 + 7Cl_2 \rightarrow 2FeCl_3 + 4SCl_2$. There are several side reactions whose products were isolated: $4FeCl_3 + FeS_2 \rightarrow 5FeCl_2 + S_2Cl_2$ (at above 350°) and $2FeS_2 + 10SCl_2 \rightarrow 2FeCl_3 + 7S_2Cl_2$ (at 40°). $FeCl_3$ is volatile in SCl_2 vapors. The complex compds. of $FeCl_3$ and S_2Cl_2 are very unstable and are decompd. on heating to 50°. The mixt. of SCl_2, S_2Cl_2 and the complex salt obtained during the chlorination of pyrite forms a ppt. of $FeCl_2$ and liquid S_2Cl_2 when boiling with pyrite. S_2Cl_2 can be easily isolated by filtration and distn. S_2Cl_2 and $FeCl_3$ can be obtained by chlorination of pyrite. At high temps. $FeCl_3$ forms no complexes with S_2Cl_2 that can be easily distd. off from the main mass of chlorides. Optimum temp. conditions for the chlorination of pyrite are 300–400°. Five references. W. R. Henn



Atomic and molecular packings. V. I. Kitaigorodskii. *Trudy Uzbekskogo Gosudarst. Univ., Sbornik Rabot Khim.* 35, 135–8(1939).—At. and mol. packings were calcd. from $C = 10^6 d/A$ and $C = 10^6 d/M$, resp., where C is the at. or mol. packing, d the sp. gr. (d^{18}_{4}) and A and M are the at. and mol. wts. All measurements except those for 7, 8, 9, 10, 17, 18, 36, 54 and 86 were taken under normal atm. pressure and at 18–25°; those excepted were taken at several degrees below their m. ps. High values of C (from 85.6 to 94.7%) are found in graphite, Fe, Co, Ni, Ru, Pd, Pt, Cu, quartz, TiO_2, SnO_2, ZrO_2, FeS$_2$, ZnS, HgS, CuS; medium C values in Be_2SiO_4, Mg_2SiO_4, $MnSiO_4$, Fe_2SiO_4, $CaSiO_3$, $CuSiO_3$, $FeCO_3$, $CaCO_3$, $MgCO_3$, $H_2Al_2Si_2O_8.H_2O$, $H_2Al_2Si_4O_{12}.2H_2O$, $KAlSi_2O_6$, $NaAlSi_2O_6$, $CaAl_2Si_2O_8$, $KH_2Al_3Si_4O_{12}$, $H_2CaAl_2Si_2O_{12}$, $BaMnO_4$, $BaSO_4$, $BaCrO_4$, $CaSO_4$, $PbCrO_4$, $PbSO_4$, $HgSO_4$, $MgSO_4$, $CuSO_4$, $FeSO_4$. low C values in $CuSO_4.7H_2O$, $ZnSO_4.7H_2O$, C_6H_6, $FeCl_3.7H_2O$, $HgCl_2.2H_2O$, $SnCl_4.5H_2O$, C_6H_6, CaH_{12}, C_6H_{14}, CaH_{10}, C_6O_7HK; very low C values (from 8.352 to 1.1933) in tristearin, inulin, cholesterol, mannitol, $Al_2(SO_4)_3.18H_2O$, $(NH_4)_2Al_2(SO_4)_4.24H_2O$, $(NH_4)_2Fe_2(SO_4)_4.24H_2O$, $Na_2SO_4.10H_2O$, $Na_2SO_4.MgSO_4.6H_2O$, $MgKCl_3.6H_2O$. The packing values decrease on hydration of anhyd. salts. The character of the bond between the single atoms has a definite effect on the packing. The C values for C_6H_6, C_6H_5Cl, m-$C_6H_4Cl_2$, o-$C_6H_4Cl_2$, p-$C_6H_4Cl_2$, C_6H_{12}, $C_6H_5CH_3$, CH_2, Me_2C CMe$_2$ are, resp., 11.25, 9.840, 8.704, 8.8329, 9.921, 9.807, 8.11 and 8.336. In Me_2C:CMe$_2$ the unsatd. pair C.C binds the atoms composing the mol. This pair pulls the atoms together, binding them more closely than does the single bond. It is concluded that similar C values are found in compds. with similar structure and chem. properties. The packing indicates not the abs. wt. of the substance, but the compactness of the lattice structure. It depends greatly on the thermodynamic conditions of the medium. W. R. H.



Complexes of ferric chloride with sulfur chlorides. V. I. Feldakov. *Uzbekskii Gosudarst. Univ.*, (Samarkand) *Sbornik* 1924 39, 10, 189-92(1938); *Khim. Referat Zhur.* 1940, No. 7, 12.—Chlorination of freshly distd. SCl_2 in the presence of $FeCl_3$ produced an unstable complex salt of the compn. $FeCl_3.2SCl_4$. The newly prepd. compd. reacts with alcs. and phenols, evolving SO_2 at low temps. and HCl at higher temps. Org. acids are transformed into chloroanhydrides by reaction with $FeCl_3.2SCl_4$. On standing the salt slowly evolves Cl_2, forming $FeCl_3.2SCl_2$.

W. R. Henn

A 50-51 A METALLURGICAL LITERATURE CLASSIFICATION

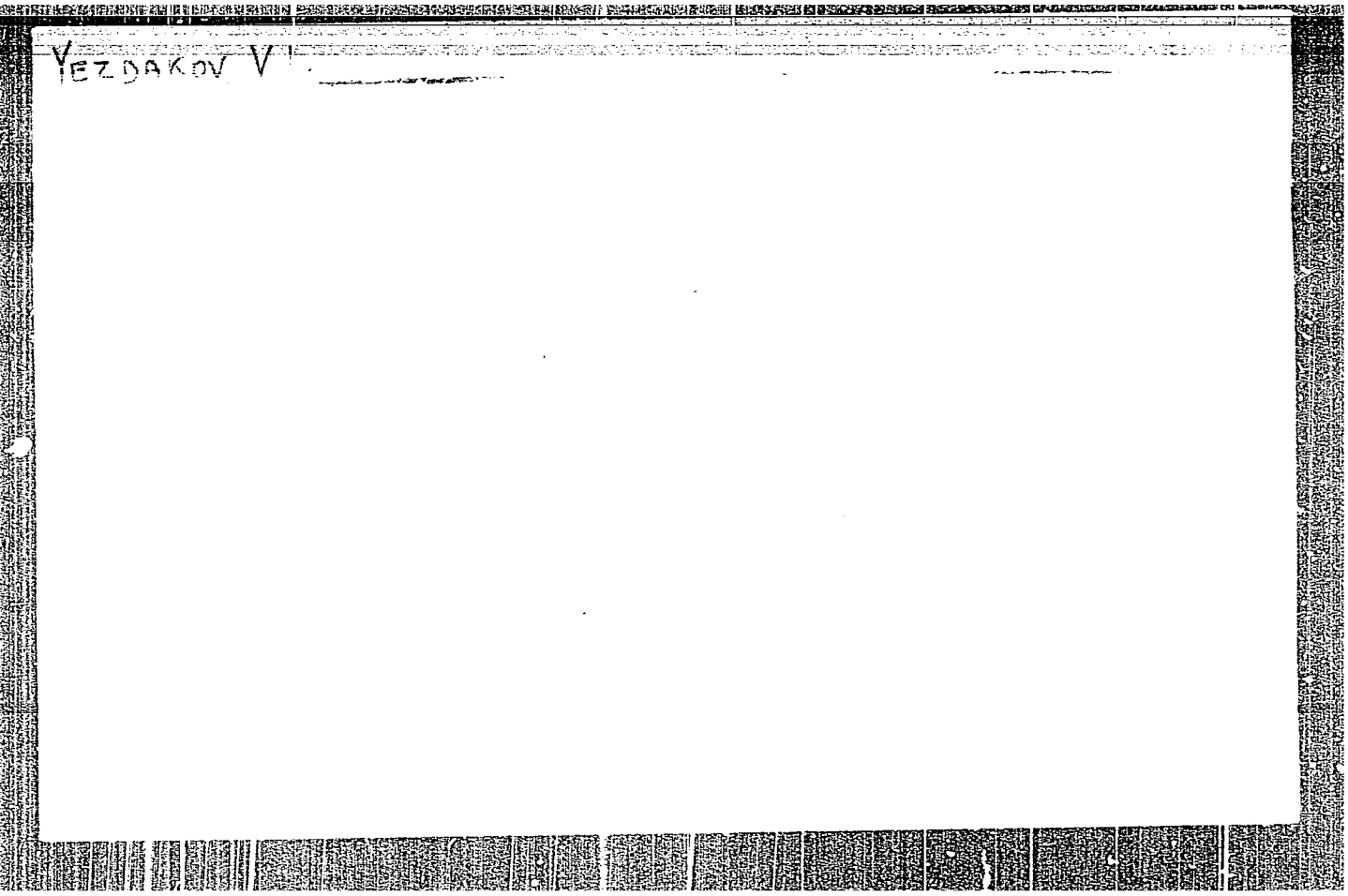
YEZDAKOV, V. I.

Yezdakov, V. I. "Concerning olored glazes on loess crockery", (Report), Soobshch. o o nauch. rabotakh chlenov Vsesoyuz. khim. o-va im. Mendeleyeva, 1949, Issue 2, p. 11-13.

S O: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

YEZDAKOV, V.I.

Irreversible changes in the adsorptive properties of clays upon heating. Soob.o nauch.rab.chl.VKHO no.2:15-20 '53. (MIRA 10:10)
(Clay) (Adsorption)



YEZDAKOV, V.I.

Analyzing clay minerals by means of dyes. Soob.o nauch.rab.chl. VKHO no.2:39-41 '55. (MIRA 10:10)
(Clay) (Dyes)