AUTHOR: Vinogradov, Yu. V.

TITLE: Selection of the number of digits and volume of reproduced information of an indicator device with a cathode-ray symbol tube of the "Charactron" type

SOURCE: Moscow. Vy*sshcye tekhnicheskoye uchilishche. Vy*chislitel'naya tekhnika, no. 4, 1964, 49-52

TOPIC TAGS: indicator device, symbol tube, cathode ray tube, Charactron tube, code voltage converter, digital converter

ABSTRACT: The author describes a cathode-ray symbol tube of the "Charactron" type and discusses its use in an indicator device which permits the reproduction and visual observation of information in the form of a digital or printed letter text, in the form of x-y (xy) graphs with special markings, etc. The operational possibilities of such indicators are then discussed, particularly with respect to their joint employment with electronic computers. A block-diagram of an indicator of this type is shown in Fig. 1 of the Enclosure, and the function and operation of the major components are analyzed in the article. Charactrons contain matrices having 64 or 80 symbols. The indicator must have two converters for the conversion of a four-place binary code into a proportional voltage.

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L 10507-65
ACCESSION NR: AT4046519

The author claims that, with respect to these converters, an accuracy of 6.2% is sufficient to provide reliable operation of the symbol sampling circuit. The screen of the indicator is square, with the maximum length of a side being 350 mm. The screen is broken down into 64 lines and 64 columns (4,096 squares), with a 5.5 x 5.5 mm^2 square for each symbol. The author also analyzes the different factors which limit the accuracy with which graphs can be reproduced on the screen of the [illegible] and the requirement for the address system of the [illegible] of the tube. This system is built on the electromagnetic principle of beam deflection. The feasibility of increasing the operational speed by reducing the inductive load is examined, along with the concepts governing the [illegible] for the conversion of the digital code into a proportional current. [illegible] essential to the reliable operation of indicator devices employing [illegible] cathode-ray symbol tubes are discussed and some structural recommendations are given. Orig. art. has: 1 figure.

Card 2/4

ACCESSION NR: AT4046519

ASSOCIATION: none

SUBMITTED: 00 ENCL: 01 SUB CODE: DP

NO REF SOV: 000 OTHER: 000

Card 3/4

ACCESSION NR: AT4046519

ENCLOSURE: 01

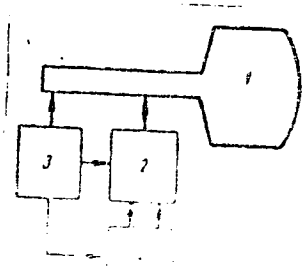

Figure 1. Block diagram of an indicator device: 1 - cathode-ray symbol tube of the "charactron" type; 2 - complex of [illegible]; 3 - [illegible] input information signals; [illegible] - input information

DZUGUTOV, M.Ya.; VINOGRADOV, Yu.V.; Prinimali uchastiye: LIZUNOVA, T.L.; BUDUCHKINA, Ye.P.

Use of large R18 steel ingots and the technology of their forging. Kuz.-shtam. proizv. 4 no.3:11-14 Mr '62. (MIRA 15:3)

(Steel ingots) (Forging)

LUBASHEVSKAYA, L.N., kand.med.nauk; VINOGRADOV, Yu.V.

Systemic lupus erythematosus. Sov.med. 25 no.6:77-83 Je '61.
(MIRA 15:1)

1. Iz kliniki kozhnykh i venericheskikh bolezney (zav. - prof. D.A.Trutnev) i fakul'tetskoy terapevticheskoy kliniki (zav. - prof. M.N.Tumanovskiy) Voronezhskogo meditsinskogo instituta (dir. - prof. N.I.Odnoralov).
(LUPUS ERYTHEMATOSUS)

BYCHKOVA, Z.S. (Moskva); VINOGRADOV, Yu.V (Moskva); DANIL'CHENKO, A.N. (Moskva); DZUGUTOV, M.Ya. (Moskva); MEZIS, V.Ya. (Moskva); RASTEGAYEV, M.V. (Moskva); STEPANOV, V.P. (Moskva).

Investigating the recrystallization of nickel-base heat-resistant alloy castings. Izv. AN SSSR. Otd. tekh. nauk. Met.i topl. no.5: 70-78 S-O '60. (MIRA 13:11)
(Heat-resistant alloys--Metallography) (Crystallization)

VINOGRADOV, Yu.V.

PHASE I BOOK EXPLOITATION SOV/4502

Akademiya nauk SSSR. Nauchnyy sovet po probleme zharoprochnykh splavov

Issledovaniya po zharoprochnym splavam, tom 6 (Investigations of Heat-Resistant Alloys, Vol. 6) Moscow, 1960. 319 p. Errata slip inserted. 3,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut metallurgii imeni A. A. Baykova. Nauchnyy sovet po probleme zharoprochnykh splavov.

Editorial Board: I. P. Bardin (Deceased) Academician, G. V. Kurdyumov, N. V. Ageyev, Corresponding Member, Academy of Sciences USSR (Resp. Ed.), I. A. Oding, I. M. Pavlov, and I. F. Zudin, Candidate of Technical Sciences; Ed. of Publishing House: V. A. Klimov; Tech. Ed.: S. G. Tikhomirova.

PURPOSE: This book is intended for research workers in the field of physics of metals and for metallurgists, particularly those working on heat-resistant alloys.

COVERAGE: This collection of 45 articles deals with various problems in the production of heat-resistant alloys. Special attention is paid to the mechanisms of deformation of such metals as aluminum, copper, iron, and nickel. Various defects and failures of metals are analyzed, and means for increasing the heat resistance and plasticity are described. Among the special problems discussed are: electrolytic conductivity of iron-aluminum alloys in the solid state; the mobility of atoms in nickel-iron alloys, depending upon defects of their crystalline structure; the kinetics of change in isolated pores; the irreversible thermal transformation of solid bodies, etc. No personalities are mentioned. References follow each article.

39

L 00710-67 EWT(m)/EWP(w)/EWA(k)/EWP(t)/ETI IJP(c) RJW/JD/RM/JG/WB

ACC NR: AP6027290 SOURCE CODE: UR/0133/66/000/008/0748/0751

AUTHOR: Sviatunova, T. V.; Doronin, V. M.; Kruzhkov, V. I.; Topilin, V. V.; Dzugutov, M. Ya.; Vinogradov, Yu. V.; Chermenskaya, N. F.; Kordonov, B. A.

ORG: "Elektrostal'" Plant (Zavod "Elektrostal'"); TsNIIChM

TITLE: Corrosion resistant nickel-based alloys

SOURCE: Stal', no. 8, 1966, 748-751

TOPIC TAGS: corrosion resistant alloy, intergranular corrosion, nickel base alloy, fatigue strength

ABSTRACT: The authors study and compare corrosion resistance of various types of nickel-based alloys. The welded joints of these alloys are subject to intercrystalline corrosion in aggressive media. Methods are discussed for eliminating this phenomenon. Among these methods are heat treatment of the welded joints, reduction of carbon and iron content in the alloys and the introduction of carbide-forming elements. It was found that intercrystalline corrosion could be eliminated by alloying N70M27 alloy with 1.4-1.7% vanadium. This eliminates intercrystalline corrosion in welded joints up to 6 mm thick without requiring heat treatment. The new alloy is designated EP496. It was also found that intercrystalline corrosion could be eliminated in chromium-nickel-molybdenum alloys by reducing their carbon-silicon and iron content. The new

Card 1/2 UDC: 669.14.018.8

L 09250-67

ACC NR: AP6027298

alloy is designated EP567. Both of these new alloys have a fatigue limit of 5-7 kg/mm^2 at 1200°C which is 3-4 times higher than that of Kh18N9T steel. A new process is developed for melting and pressure working these alloys to satisfactory deformability. EP496 and EP567 alloys are melted in open induction furnaces with 500 and 1000 kg capacity. The ingots are worked on snagging machines until all defects are removed from their surfaces. Both alloys are difficult to machine, nevertheless, they can be roughed with much less difficulty than Kh18N10T steel. Deformation temperatures for both alloys are given. Both of these alloys have excellent corrosion resistance in hydrochloric and sulfuric acids at various temperatures and concentrations. The welded seams of these alloys are not subject to intercrystalline corrosion and therefore can be recommended for welded sheet structures and tubes used in the chemical and petroleum industries. Orig. art. has: 6 figures, 2 tables.

SUB CODE: 11/ SUBM DATE: None/ ORIG REF: 003/ OTH REF: 005

PAVLOV, I.M.; DANIL'CHENKO, A.N.; RASTEGAYEV, M.V.; MEZIS, V.Ya.; DZUGUTOV, M.Ya.; VINOGRADOV, Yu.V.

Effect of plastic deformation during rolling on time length before rupture and on the mechanical properties of heat-resistant alloys. Issl. po zharopr. splav. 9:108-113 '62. (MIRA 16:6)
(Heat-resistant alloys--Testing)
(Deformations (Mechanics))

S/182/60/000/003/002/007
A161/A029

AUTHORS: Dzugutov, M.Ya.; Vinogradov, Yu.V.; Stepanov, V.P.

TITLE: The Effect of the Deformation Degree on the Results of Ultrasound Inspection in Forgings From High-Alloy Heat-Resistant Steel and Alloys

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, 1960, No. 3, pp. 10 - 13

TEXT: Non-uniform grain size in heat-resistant steel forgings with spots of large-grain structure causes difficulties in ultrasound defectoscopy, i.e., the bottom signal disappears partly or completely in large-grain zones, or false defect pulses are obtained. It was revealed that the forging technology used at the plant gave practically no large-grain zones, but the remaining zones of the initial cast structure caused the same trouble. To determine the effect of summary deformation and of the forging dimensions on the results of ultrasound inspection, an investigation has been undertaken with forgings from alloys ЭИ437Б (EI437B) and ЭИ481 (EI481), in cylindrical and washer shape. The forgings were prepared on a 4,000-ton press from an octagonal 2,100 kg ingot. The deformation coefficient is determined at the "Elektrostal'" works (there exists no general

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The Effect of the Deformation Degree on the Results of Ultrasound Inspection in Forgings From High-Alloy Heat-Resistant Steel and Alloys

opinion on the determination method of this coefficient) as the relation of the final billet length to the initial length in the drawing operation, or as relation of the initial billet height to the final (or of the final and initial cross section area) in swaging. Explanation is given (in Table 1) how the total deformation coefficient is calculated for the case of alternating drawing and swaging operations. Ultrasound defectoscopes УЗД7Н (UZD7N), 86ИМ (86IM), В47И (V47I) and others were used, with frequencies of 1.4 - 2.5 megacycles; transformer oil or spindle oil was employed as medium. It was concluded after experiments and comparison of practical production data that the inspection results depend on the deformation degree by forging and on the forging dimensions in the sound direction. As may be seen from Tables 2 and 3, the deformation coefficient 7 or lower did not give a complete ultrasound inspection in forgings of EI481 steel of 155 mm height because of the presence of not recrystallized cast structure, and the same happened with EI437B steel forgings of 215 mm height and 8.16 deformation coefficient, but the coefficient 11 in the first case and 13.3 in the second was sufficient. It was stated that heat treatment of forgings

S/182/60/000/003/002/007
A161/A029

The Effect of the Deformation Degree on the Results of Ultrasound Inspection in Forgings From High-Alloy Heat-Resistant Steel and Alloys

with incompletely recrystallized structure and incomplete ultrasound permeability is needed to complete recrystallization. It consists in heating slightly over the temperature of beginning recrystallization soaking in this temperature and cooling. Heating to a higher temperature leads to a more complete and rapid recrystallization process, but can cause the beginning of the collective recrystallization process that could again impair the inspection. Summarizing, the following conclusions are drawn: 1) The total deformation magnitude has a decisive effect, and the accuracy of the results grows with a growing (to a certain limit) deformation coefficient. 2) The inspection accuracy drops with increasing dimensions of forgings in the direction of sound (with equal deformation coefficient). 3) The nature of alloy, or steel, also has an effect. 4) Special heat treatment of forgings that could not be "sounded" at all or partly in the state after forging, usually improves the "soundability" due to more complete recrystallization. There are 2 photographs and 6 tables.

Card 3/3

VINOGRADOV, Yu. V.

3

34519
S/659/61/007/000/006/044
D217/D303

18.1150

AUTHORS: Rastegayev, M.V., Danil'chenko, A.N., Dzugutov, M.Ya., Bychkova, Z.S., Mezis, V.Ya., Vinogradov, Yu.V., and Stepanov, V.P.

TITLE: Recrystallization of cast, deformation-resistant alloys of the nichrome type

SOURCE: Akademiya nauk SSSR. Institut metallurgi. Issledovaniya po zharoprochnym splavam, v. 7, 1961, 47 - 57

TEXT: The work was carried out under the supervision of I.M. Pavlova. The recrystallization of nichrome-type alloys has been studied very little, since their low plasticity in the cast state makes experimenting difficult. Therefore, a new method of hot working had to be developed, rendering upsetting without rupturing possible. This method, in which uniform upsetting is achieved, consists of making shallow flat grooves (0.5 - 0.8 mm) with rims of 0.5 mm width, in the end faces of a cylindrical specimens (20 mm long and 20 mm diameter). The grooves are filled with moistened asbestos or

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S/659/61/007/000/006/044
D217/D303

Recrystallization of cast, ...

water glass, acting as lubricants during high temperature deformation under a drop hammer or press. This enables the contact friction to be decreased to a minimum and thereby permits deformation under conditions of linear compression. The results of investigations of recrystallization processes occurring in metallic alloys on hot working by pressure, are usually presented in the form of space diagrams of recrystallization of the second order within the coordinates "temperature, grain size and degree of deformation". However, these diagrams do not represent the entire recrystallization process which includes the old crystals to a certain extent, as well as any possible intercrystalline failures and their weldability. Therefore, the regions of full and incomplete recrystallization, as well as regions of failure and weldability between the crystals, should be indicated. A nichrome type alloy ingot, made under production conditions, was used in the investigation. Since the maximum transverse diameter of the dendritic crystals of the ingot attains 10 - 13 mm, the dimensions of the specimens were increased to 30 mm diameter and 40 mm length, as against 20 x 20 mm used in the uniform upsetting method. The dimensions of the end fa-

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Recrystallization of cast, ...

ce grooves were increased proportionately to the new specimen dimensions. The specimen axes coincided with the longitudinal direction of the ingot. Three-dimensional recrystallization diagrams were constructed for cast nichrome type alloys by the "uniform" upsetting method, and also for cases in which the soaking time during annealing of the hot deformed metal had to be allowed for. The regions of complete recrystallization of a sound or defective structure, as well as regions of complete recrystallization of structures with welded-in defects were labelled. In all stages of hot deformation of nichrome-type alloys (in the cast or preliminarily recrystallized state) recrystallization (appearance and growth of new grains) was observed to take place. It was found that under certain conditions of hot working and appropriate cooling of forgings, a complex intercrystalline cohesion structure could be obtained in nichrome-type alloys which effectively increased their high temperature resistance. There are 6 figures, 3 tables and 12 Soviet-bloc references.

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RASTEGAYEV, M.V.; DANIL'CHENKO, A.N.; DZUGUTOV, M.Ya.; BYCHKOVA, Z.S.; MEZIS, V.Ya.; VINOGRADOV, Yu.V.; STEPANOV, V.P.

Recrystallization of cast, hard to deform, nichrome-type alloys. Issl. po zharopr. splav. 7:47-57 '61. (MIRA 14:11)
(Nickel-chromium alloys--Metallography)

34421
S/182/62/000/003/002/006
D040/D113

1.1400

AUTHORS: Dzugutov, M. Ya., and Vinogradov, Yu.V.

TITLE: Application and forging of large ingots of R18 steel

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, no. 3, 1962, 11-14

TEXT: An attempt was made to reduce the carbide heterogeneity in P -18 (R-18) high-speed steel, as this affects the strength of the cutting edge of tools. As the only known way of achieving this consists in increasing the plastic deformation ratio applied to the cast metal, large ingots weighing 500, 850, 1200 and 1700 kg were used instead of the conventional 200 kg ingots used for rolling, or the 300 kg ingots used for forging. Details of the heating and forging techniques used for 1200 kg ingots with the use of chamber and continuous heating furnaces, a 4000-t press and several drop hammers of different capacity are given. The ingots were annealed before the experiments to prevent cracking. Calcium and cerium additions were used for deoxidizing part of the metal, but this had no

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Application and forging ...

effect on the forgeability; the attempt to improve forgeability by using square instead of conventional round ingots failed. Part of the ingots was snagged to 7 mm depth prior to heating, but this resulted only in a slight increase in the yield of good metal. The following conclusions were drawn: (1) Shaped billets forged from 1200 kg ingots have a lower carbide heterogeneity than billets of the same cross section produced from 200-300 kg ingots; however, the heterogeneity is not sufficient to meet the standard requirements per ГОСТ 5952-51 (GOST 5952-51). Besides, the use of 1200 kg ingots results in a considerably lower yield of good metal, and lower productivity of forging equipment; (2) forging without snagging 1200 kg ingots, results in a 10-15% lower yield of good metal compared to the yield from 200-300 kg ingots, and the productivity of a 7-ton drop forging hammer is reduced 2-3 times compared to the productivity in forging 200-300 kg ingots; (3) The snagging of 1200 kg ingots prior to forging, improves the forgeability, raises the productivity of the hammers, reduces the work required for surface cleaning, but as compared to forging these ingots without

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snagging, does not result in an increased yield of good metal. The productivity of the hammer is raised but is still 1.7 to 2 times lower than in forging 300 kg ingots. (4) Any increase in the ingot weight (above 1200 kg) is accompanied by difficulties in cooling, heating and forging. Metal losses are increased, and the productivity of forging equipment decreases. Therefore, it appears inadvisable to forge ingots heavier than 1200 kg. In order to obtain a further reduction in the carbide heterogeneity, means must be found for increasing the forging reduction ratio of billets produced from 1200 kg ingots. T.L.Lizunova and Ye.P. Burduchkina took part in the experiments. There are 2 tables and 3 Soviet references.

Card 3/3

KLIMOV, Yu.M.; CHIKIN, V.V.; ANISIMOV, N.I.; BARSKOV, I.M.; VINOGRADOV, Yu.V.; GAVRILOV, A.N.; GAUKHMAN, L.A.; GOLOV, A.P.; GOL'DMAN, L.S.; GRIGORNIKOV, G.I.; YEFIMOV, A.N.; ZALUTSKIY, M.S.; ZAYTSEVA, A.V.; OIYRYSH, A.I.; KANDARITSKIY, V.S.; KAPRANOV, I.A.; KOVALEV, N.I.; KOVALEVSKIY, K.A.; KOLOSOV, A.F.; KRIVOV, A.S.; KRYLOV, R.M.; LEVITAS, A.G.; MALYGIN, M.A.; MORALEVICH, Yu.A.; MOTYLEV, A.S.; NESTEROV, M.V.; NIKOL'SKIY, A.V.; ORLOV, G.M.; ORLOV, Ya.L.; PARENSKIY, V.M.; POLYAKOV, A.S.; RUBIN, V.I.; SVANIDZE, K.N.; STRIGIN, I.A.; TAKOYEV, K.F.; TRUBNIKOV, S.V.; CHERNYSHEVA, L.N.; CHESNOKOV, N.Ye.; SHAMBERG, V.M.; STRUMILIN, S.G., akademik, red.; ANTOSHKOVA, L., red.; MIKAELYAN, E., red.; MUKHIN, Yu., tekhn.red.

[Dictionary of the seven-year plan from A to Z] Slovar' semiletki ot A do IA. Moskva, Gos.izd-vo polit.lit-ry, 1960. 397 p. (MIRA 13:7)

(Russia--Economic policy)

ANISIMOV, B.V., kand.tekhn.nauk; VINOGRADOV, Yu.V., inzh.

Precision in the interpretation of continuously varying magnetudes in a numerical code. [Trudy] MVTU no.2:86-94 '59. (MIRA 13:5)
(Information theory)

VINOGRADOV, Yu. V.

Moscow. Vyssheye tekhnicheskoye uchilishche imeni Baumana. Kafedra matematicheskikh mashin

Vychislitel'naya tekhnika (Computer Techniques) Moscow, Mashgiz, 1959. 153 p. (Series: Moscow. Vysshaye tekhnicheskoye uchilishche. Sbornik, No. 2) 2,500 copies printed.

Ed.: B.V. Anisimov, Candidate of Technical Sciences; Tech. Eds.: B.I. Model' and A.P. Dvurova; Managing Ed. for Literature on Machine Building and Instrument Construction: N.V. Pokrovskiy, Engineer.

PURPOSE: This book may be useful to aspirants and other students specializing in computer technology, and also to designers and engineering and technical personnel who make use of electronic computers.

COVERAGE: The articles contain the results of theoretical and experimental studies on the performance of various components of electronic computers. Among the topics discussed are program storage, control devices, the connection between the parameters of an algorithm and a machine, etc. The application of these components to the control of technological processes is also discussed. 'Anisimov, B.V., Cand. Tech. Sci/and V.N. Golubkin, Candidate of Technical Sciences. Analysis of the Quality of Servo-Systems With Discrete Element 32

Dobrov, Ye.V., Engineer. The Effect of Block Diagram Parameters on the Performance Quality of a Tubeless Direct Current Operational Amplifier 46

Anisimov, B.V., Candidate of Technical Sciences, V.N. Golubkin, Candidate of Technical Sciences, and Yu.M. Dvzhenko, Engineer. Device for Transforming the Form of Recording of a Program 56

Trubnikov, B.V. Candidate of Technical Sciences, and Ye.I. Nekrylov, Engineer. Certain Principles of Constructing Local Control by External Memory Devices 21

Vlasenko, V.I., Candidate of Technical Sciences, G.S. Zhdanov, Professor, A.M. Desent'ikh, Engineer, and I.M. Lukonov, Engineer. Method of Forming the Images of Numbers by Means of a Ferrite Matrix 64

Shreyder, Yu.A., Candidate of Physical and Mathematical Sciences. The Connection Between the Parameters of an Algorithm and of a Machine 70

Anisimov, B.V., Candidate of Technical Sciences, V.N. Golubkin, Candidate of Technical Sciences, and A.Ya. Savel'yev, Engineer. Device for the Control of Recording of Information on Magnetic Tape 75

Vasil'yev, O.F., Engineer. Analysis of Certain Relationships for an Economical Selection of the Dimensions of a Magnetic Drum 81

Anisimov, B.V., Candidate of Technical Sciences, and Yu.V. Vinogradov, Engineer. On the Problem of the Exactness of the Representation of Continuously Varying Values in a Numerical Code 86

Shreyder, Yu.A., Candidate of Physical and Mathematical Sciences. Solution of Boundary Value Problems by the Method of Polynomial Approximations 95

Markov, G.Ya., Engineer. Certain Considerations on the Preventive Control of Electronic Computers 99

M.S. Soylin, Engineer. Photoelectric Device Which Receives Printed Numerical Signs 108

Palagnevskiy, A.M., Engineer. Analysis of Information Storage Components of Computers 121

Chetverikov, V.N., Candidate of Technical Sciences. Relay Integrating Drive With Electromagnetic Powder Clutch 130

Kalashnikov, V.A., Engineer. Certain Algorithms for the Rational Planning of Production 142

Kuznetsov, M.M., Candidate of Technical Sciences. Circuit Mechanisms for Programmed Control 148

VINOGRADOV, Yu. V.: Cand Master Tech Sci (diss) -- "Analysis of the precision of work of a high-speed voltage transformer in cipher code". Moscow, 1958. 15 pp (Min Higher Educ USSR, Moscow Order of Lenin and Order of Labor Red Banner Higher Tech School im N. E. Bauman), 150 copies (KL, No 5, 1959, 149)

ANISIMOV, B.V.; VINOGRADOV, Yu.V.

Accuracy of a voltage-to-digital converter with feed back.
Nauch.dokl.vys.shkoly; mash.i prib. no.4:210-219 '58.
(MIRA 12:5)
1. Stat'ya predstavlena kafedroy "Matematicheskiye mashiny"
Moskovskogo vysshego tekhnicheskogo uchilishcha im. Baumana.
(Electronic calculating machines)

86064

S/180/60/000/005/005/033
E111/E135

18 7500 1146, 1416, 1418

AUTHORS: Bychkova, Z.S., Vinogradov, Yu.V., Danil'chenko, A.N., Dzugutov, M.Ya., Mezis, V.Ya., Rastegayev, M.V., and Stepanov, V.P. (Moscow)

TITLE: Investigation of the Recrystallization of Cast Nickel-Based Heat Resisting Alloy

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1960, No. 5, pp. 70-78

TEXT: The authors describe their investigation of the difficultly deformable nickel-based alloy "EI-(B, without giving its composition). The object of the work was to study conditions for its hot deformation, with special reference to recrystallization. The microstructure of the cast alloy is shown in the top left section of Fig. 1, while that after 14% linear compression (as described by Rastegayev, Ref. 1) is shown in the top right. Differences in grain size under different conditions are illustrated by the lower sections of Fig. 1. For the main investigation the authors used a production ingot of the alloy to make blanks (somewhat larger than in the original use of linear deformation (Ref. 1) which were deformed at 1100, 1150, 1200 and

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E111/E135

Investigation of the Recrystallization of Cast Nickel-Based Heat Resisting Alloy

1240 °C to 0.5-80%. After air cooling, the deformed specimens were cut vertically into four parts; one of which was annealed at the deformation temperature for 2 hours, another at 1200 °C for 5 hours. Polished sections were made from each. Results are presented as graphs of average grain size against degree of deformation and temperature. Figs 2, 3 and 4 relate, respectively, to deformation without annealing, deformation with annealing at the same temperature, and deformation with annealing at 1200 °C. Complete-recrystallization regions with a sound or defective structure and with welded defects are indicated. Fig.5 illustrates microstructures of undeformed and deformed specimens. At high degrees of deformation defects formed at lower degrees are welded up. New grains appear and grow at all stages of hot deformation. An investigation was also made of the influence of high-temperature treatment (pressure or heat) on the heat-resisting characteristics. For this, type КРД-3 (KRD-3) circular test pieces were made from discs pressed from the alloy at 1250 °C (cooling to 750-800 °C in 10-12 min., then in air).

86064

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E111/E135

Investigation of the Recrystallization of Cast Nickel-Based Heat Resisting Alloy

Structure was determined without (Table 1) and with (Table 2) deformation. Under certain conditions the heat resisting properties of the alloy are improved as a result of the appearance of serrations at grain boundaries (Fig. 6). The work was directed by I.M. Pavlov.
There are 6 figures, 2 tables and 12 Soviet references.

SUBMITTED: June 1, 1960

Card 3/3

DANIL'CHENKO, A.N.; RASTEGAYEV, M.V.; MEZIS, V.Ya.; DZUGUTOV, M.Ya.; VINOGRADOV, Yu.V.

Effect of press forging on the durability and plasticity of alloys. Issl. po zharopr. splav. 6:211-222 '60. (MIRA 13:9)
(Alloys--Metallography) (Deformations (Mechanics))

40980

S/659/62/009/000/014/030
I003/I203

AUTHORS: Pavlov, I. M., Danil'chenko, A. N., Rastegayev, M. V., Mezis, B. Ya., Dzugutov, M. Ya., and Vinogradov, Yu. V.

TITLE: The influence of plastic deformation during rolling on the time to failure, and on the mechanical properties of heat-resisting alloys

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Issledovaniya po zharoprochnym splavam. v. 9. 1962. Materialy Nauchnoy sessii po zharoprochnym splavam (1961 g.), 108–13

TEXT: In an article published in vol. 6 of this series, the same authors (except Pavlov) concluded that the above influence should be investigated for every heat-resisting alloy individually. In the present article, a non-defined alloy designated as "Alloy B" usually used for flat forgings was investigated. As a criterion of its heat-resistance the time was taken to failure at 800°C, and its plasticity was evaluated from its shock resistance at 800°C, and at room temperature. It was concluded that the time to failure of this alloy and its mechanical properties can be increased by plastic deformation with subsequent heat-treatment. This increase is probably due to the close-packed lattice of the acicular strengthening phase. There are 3 figures.

Card 1/1

VINOGRADOV, Z.

Inexhaustible spring. Sov.foto 20 no.3:40-41 Mr '60.
(MIRA 13:7)

(Nature photography)

VINOGRADOV, Z

USSR / General and Specialized Zoology. Insects. Harmful Insects and Acarids. Pests of the Technical, Oil, Medicinal and Essential-Oil Cultures. P

Abs Jour : Ref Zhur - Biol., No 18, 1958, No. 82971

Author : Neymanzade, E.; Vinogradov, Z.
Inst : Not given
Title : Mercaptophos as a Powerful Remedy in the Struggle Against the Spider Mite on the Cotton Plant

Orig Pub : Azerb. sosyalist kend teserrufaty, 1957, No 7, 44-45; Sotz. s. kh. Azerbaydzhana, 1957, No 7, 44-45

Abstract : After an airplane spraying of the cotton plant (1 kg/hectare, per preparation), on the 4th day only 1% of the original mites remained alive. On the 8th day, the mites disappeared completely; the cotton plant developed normally; the plants, under inspection, had a violet-brown color, and their lower and middle parts

Card 1/2

USSR / General and Specialized Zoology. Insects. Harmful Insects and Acarids. Pests of the Technical, Oil, Medicinal and Essential-Oil Cultures. P

Abs Jour : Ref Zhur - Biol., No 18, 1958, No. 82971

began to shed leaves. Quite often, a single treatment in the beginning of the second 10-day period of July was sufficient, but in dry years a twofold spraying was necessary - in the beginning of June (0.75 kg/hectare) and in the middle of the first 10-day period of July (1.2 kg/hectare). -- A. P. Adrianov

Card 2/2

VINOGRADOV, Z.

A wonderful school. Sov. foto 17 no.3:38-39 Mr '57. (MIRA 10:6)
(Photography--Study and teaching)

VINOGRADOV, Z.S.

Evaluating varietal specimens of various sorgo types. Sbor. trud. asp. i mol. nauch. sotr. VIR no.5:155-162 '64. (MIRA 18:3)

VINOGRADOV-NIKITIN, P. Z.

P. Z. Vinogradov-Nikitin, "Gum Canker (Aecidium elatinum Alb. et Schwei:,) A Fir Tree Injurer," Sovetskie Subtropiki, no. 3, 1931, pp. 79-81. 20 Jul2
(Translation B.P.I. 960)

SO: Sira Si 90-53, 15 Dec 1953

VINOGRADOVA, A., inzh.; SMIRDINA, N., starshiy nauchnyy sotrudnik

Hotbeds with a new system of soil heating. Sel'. stroi. 15 no. 2:19-20 F '61. (MIRA 14:5)

1. NIIsel'stroy.

(Hotbeds)

AUERMAN, L.; VINOGRADOVA, A.; SUVOROVA, M.; YAKOVLEVA, L.

Sedimentation method for determining the baking strength of wheat flour and grain. Muk.-elev. prom. 29 no.9:15-17 S '63. (MIRA 17:1)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti.

KOSILOVA,A., kandidat sel'skokhozyaystvennykh nauk; PREVO,A., kandidat biologicheskikh nauk; VINOGRADOVA,A.,

Quality of meat from fattened poultry. Mias. ind. SSSR 26 no.3:23-25 '55. (MLRA 8:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut ptitseperera-batyvayushchey promyshlennosti
(Poultry)

VINOGRADOVA, A.A.

Reader conference of the All-Union "Inzherno-fizicheskogo zhurnal" and the international journal "Teplomassoperenos." Inzh.-fiz.zhur. no.5:124-130 My '62. (MIRA 15:7)
(Engineering--Periodicals)

VINOGRADOVA, A.A.

"System of professional training in the Fishery Industry."

Report presented at the FAO Seminar and Study Tour for Fishery Administrators from the Indo-Pacific and Mediterranean Regions, Moscow 11Sep-14 Oct 1961.

VINOGRADOVA, A.A.

Power engineering in France in 1959 (from "Electricité de France, Résultats techniques provisoires, 1959). Energokhoz.za rub. no.3: 44-45 My-Je '60. (MIRA 13:7)
(France--Power engineering)

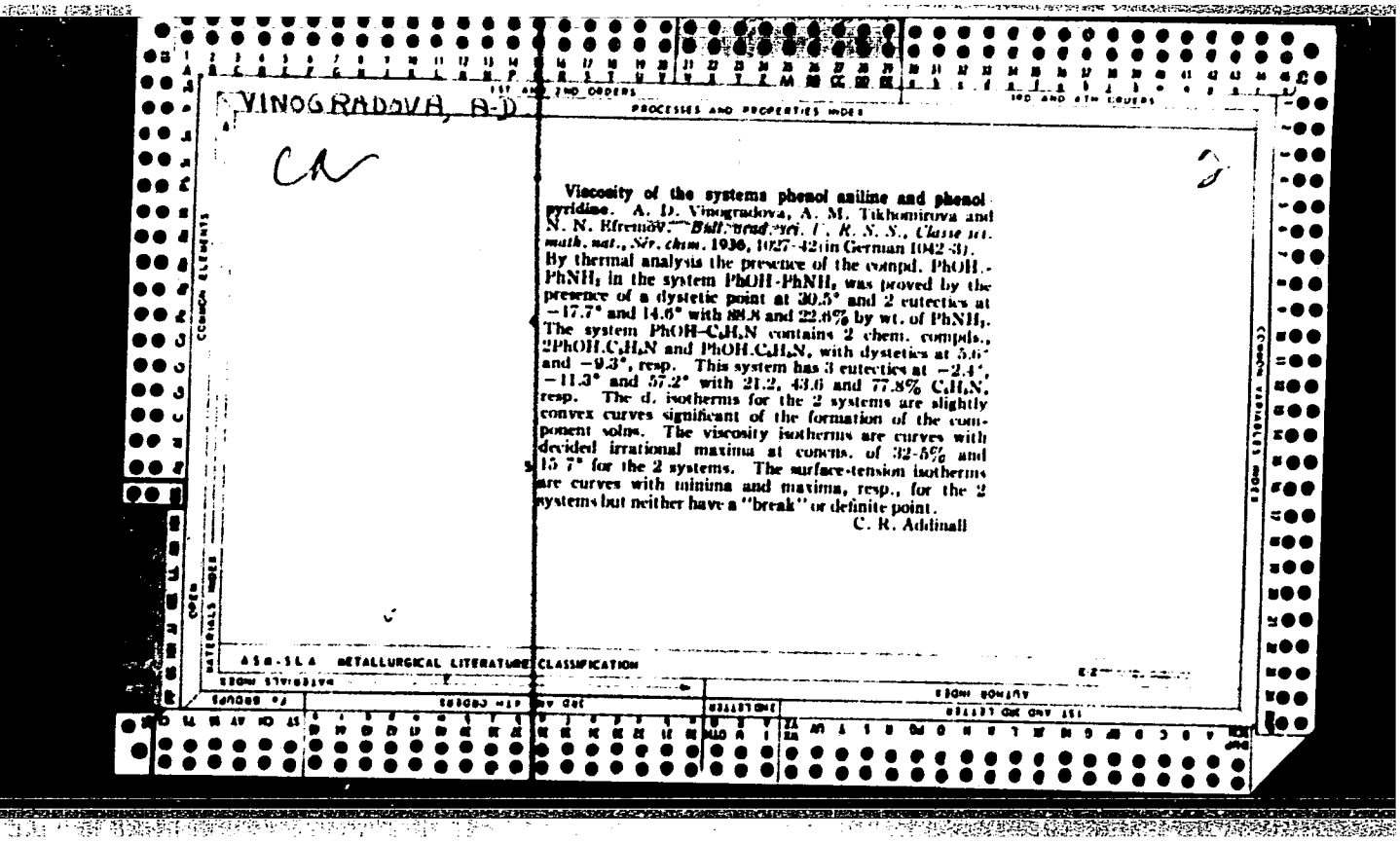
VINOGRADOVA, A.A.

Electric power rates in Russia. Elektrichestvo, no.1:54-55 Ja-F '52. (MLRA 1:11)

(Electric utilities--Rates)

TANANAYEV, I.V.; VINOGRADOVA, A.D.

Composition and stability of complex fluoferrates and fluoberyllates in solution, as provided by solubility data. Zhur.neorg. khim. 5 no.2:321-326 F '60. (MIRA 13:6)
(Fluoberyllates) (Fluoferrates)



VINOGRADOVA, A-D

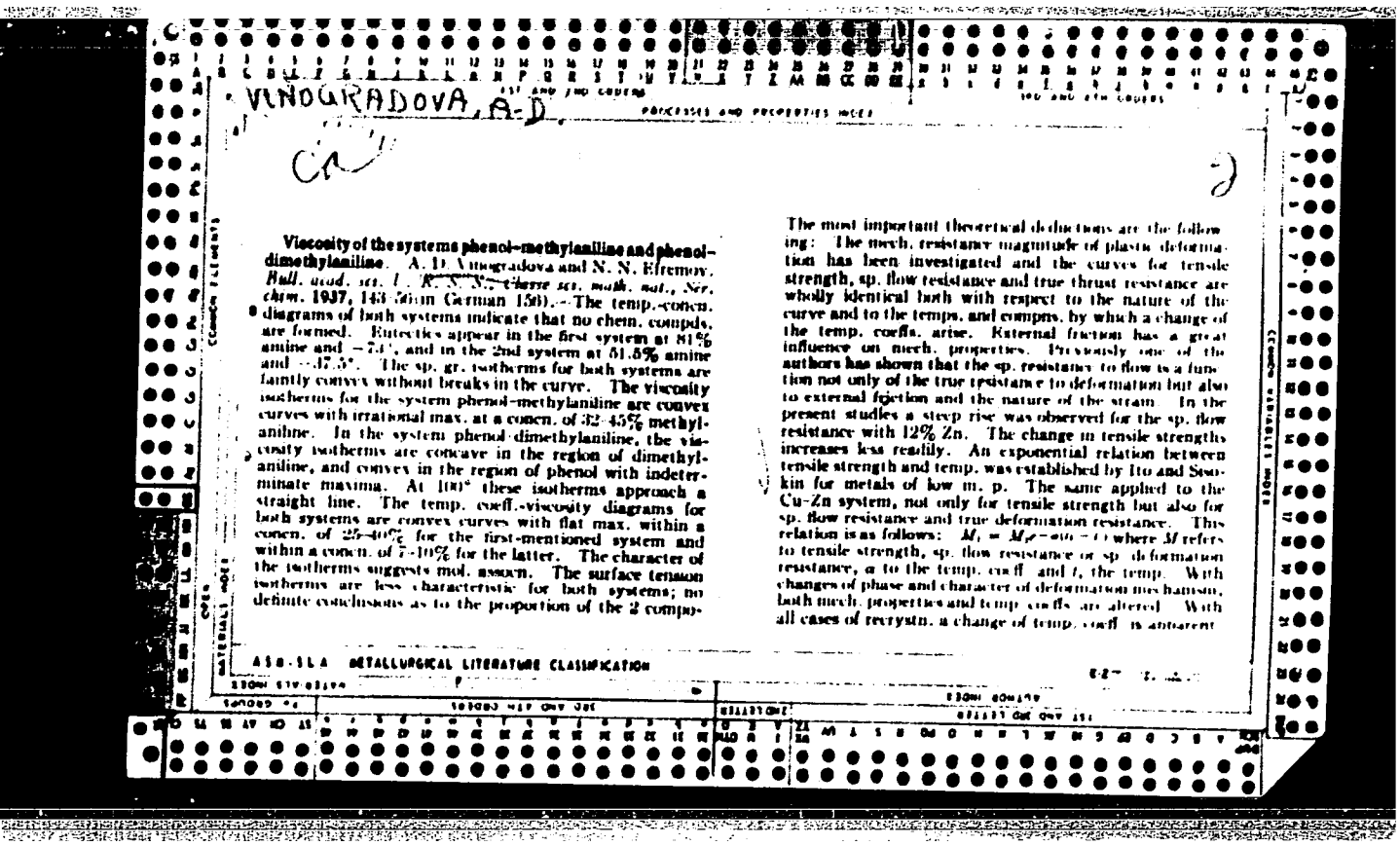
CA

PROCESSES AND PROPERTIES INDEX

Viscosity of the systems phenol aniline and phenol pyridine. A. D. Vinogradova, A. M. Tikhomirova and N. N. Efremov. *Bull. acad. sci. U. R. S. S., Classe sci. math. nat., Sér. chim.* 1936, 1027–42 (in German 1042–3). By thermal analysis the presence of the compd. $PhOH \cdot PhNH_2$ in the system $PhOH$-$PhNH_2$ was proved by the presence of a dystetic point at 30.5° and 2 eutectics at −17.7° and 14.6° with 88.8 and 22.8% by wt. of $PhNH_2$. The system $PhOH$–C_5H_5N contains 2 chem. compds., $2PhOH.C_5H_5N$ and $PhOH.C_5H_5N$, with dystetics at 5.6° and −9.3°, resp. This system has 3 eutectics at −2.4°, −11.3° and 57.2° with 21.2, 43.6 and 77.8% C_5H_5N, resp. The d. isotherms for the 2 systems are slightly convex curves significant of the formation of the component solns. The viscosity isotherms are curves with decided irrational maxima at concns. of 32.5% and 15.7° for the 2 systems. The surface-tension isotherms are curves with minima and maxima, resp., for the 2 systems but neither have a "break" or definite point.

C. R. Addinall

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



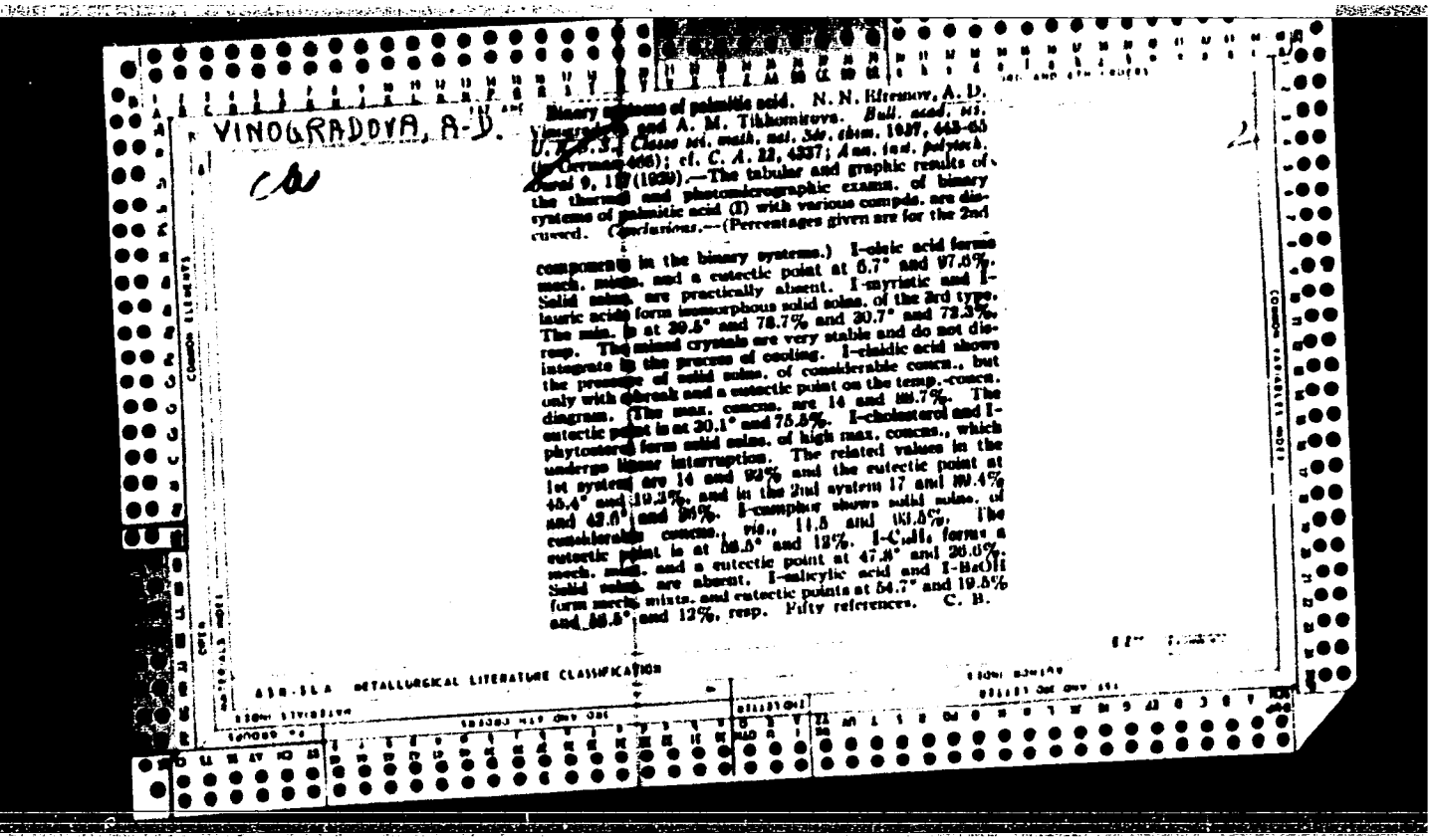
VINOGRADOVA, A-D

Viscosity of the systems phenol–methylaniline and phenol–dimethylaniline. A. D. Vinogradova and N. N. Efremov. *Bull. acad. sci. U.R.S.S., classe sci. math. nat., Sér. chim.* 1937, 143–76 (in German 156).—The temp.-concn. diagrams of both systems indicate that no chem. compds. are formed. Eutectics appear in the first system at 81% amine and −7.4°, and in the 2nd system at 51.5% amine and −17.5°. The sp. gr. isotherms for both systems are faintly convex without breaks in the curve. The viscosity isotherms for the system phenol–methylaniline are convex curves with irrational max. at a concn. of 32–45% methylaniline. In the system phenol–dimethylaniline, the viscosity isotherms are concave in the region of dimethylaniline, and convex in the region of phenol with indeterminate maxima. At 100° these isotherms approach a straight line. The temp. coeff.-viscosity diagrams for both systems are convex curves with flat max. within a concn. of 25–40% for the first-mentioned system and within a concn. of 7–10% for the latter. The character of the isotherms suggests mol. assocn. The surface tension isotherms are less characteristic for both systems; no definite conclusions as to the proportion of the 2 compo-

The most important theoretical deductions are the following: The mech. resistance magnitude of plastic deformation has been investigated and the curves for tensile strength, sp. flow resistance and true thrust resistance are wholly identical both with respect to the nature of the curve and to the temps. and compns. by which a change of the temp. coeffs. arise. External friction has a great influence on mech. properties. Previously one of the authors has shown that the sp. resistance to flow is a function not only of the true resistance to deformation but also to external fjction and the nature of the stream. In the present studies a steep rise was observed for the sp. flow resistance with 12% Zn. The change in tensile strengths increases less readily. An exponential relation between tensile strength and temp. was established by Ito and Soo-kin for metals of low m. p. The same applied to the Cu–Zn system, not only for tensile strength but also for sp. flow resistance and true deformation resistance. This relation is as follows: $M_t = M_{t'} - \alpha(t - t')$ where M refers to tensile strength, sp. flow resistance or sp. deformation resistance, α to the temp. coeff. and t, the temp. With changes of phase and character of deformation mechanism, both mech. properties and temp. coeffs. are altered. With all cases of recrystn. a change of temp. coeff. is apparent

A58-51A METALLURGICAL LITERATURE CLASSIFICATION

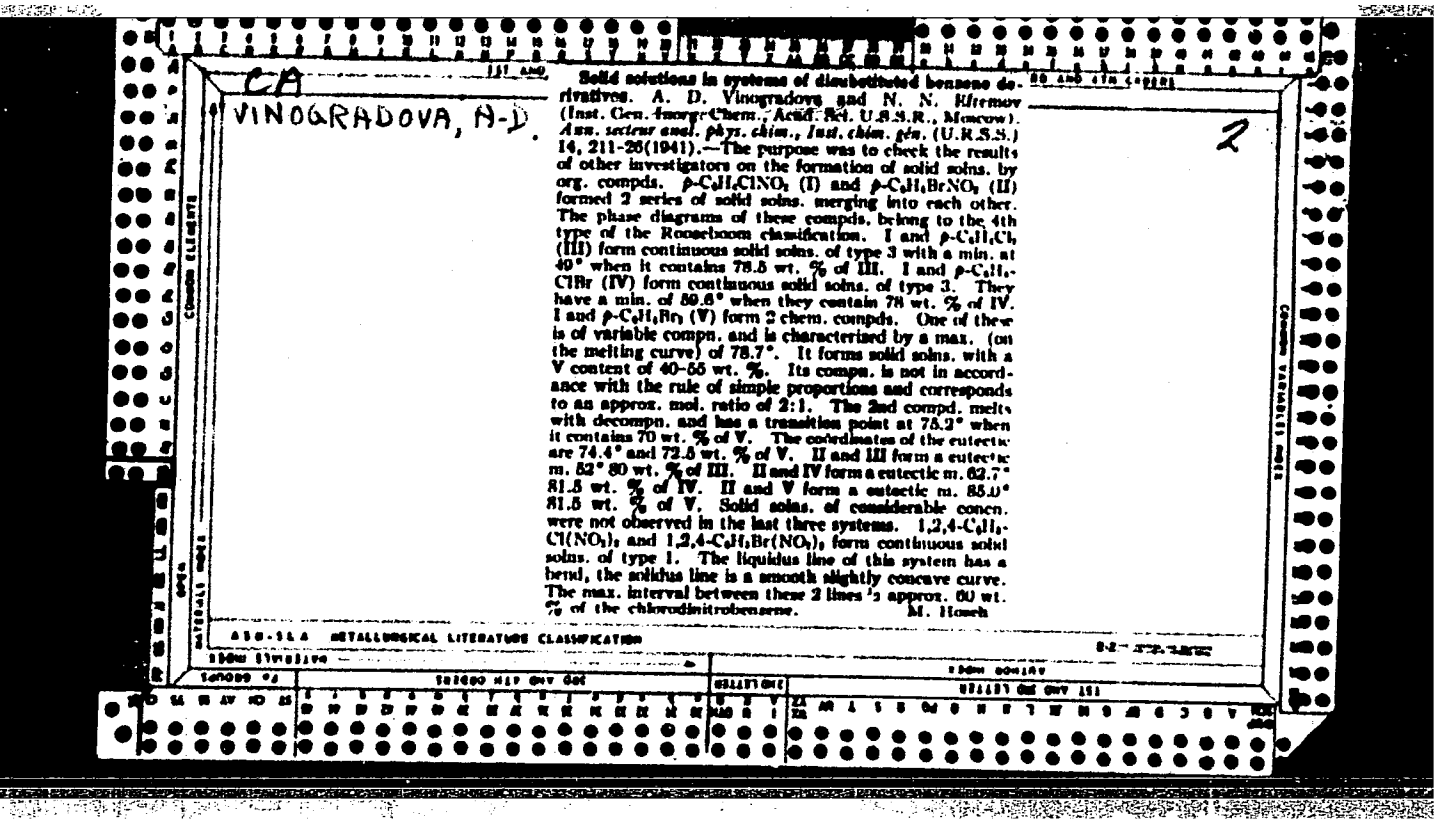
The elevation of mech. properties in the region of the α phase (12% Zn) both at room and elevated temp. is explained either through max. nonhomogeneity of Latter at the corresponding compn. or through a steep rise of the external coeff. of friction for this compn. Brass of 12% Zn content at elevated temps. shows elevated mech. properties with no diminution in plasticity in comparison with other compns. of brass. If in the alloys of α-brass no special conditions are laid down, yet special demands are set with respect to elevation of the mech. properties of external friction coeffs., then alloys of 9-15% Zn should be avoided. A hot mixt. of this compn under pressure requires one of the largest energy consumptions in proportion to brass of other compns. The mech. interpretation of the phase diagram provides an entire series of useful information for the foundation of tech. processes of metal working under pressure. W. A. Cisek



VINOGRADOVA, A-D.

Binary systems of palmitic acid. N. N. Efremov, A. D. Vinogradova and A. M. Tikhomirova. *Bull. acad. sci. U.R.S.S., Classe sci. math. nat. Sér. chim.* 1937, 443-65 (in German 466); cf. *C. A.* 32, 4337; *Ann. inst. polytech. (Novocherkassk)* 9, 139 (1929).—The tabular and graphic results of the thermal and photomicrographic examn. of binary systems of palmitic acid (I) with various compds. are discussed. *Conclusions.*—(Percentages given are for the 2nd component in the binary systems.) I-oleic acid forms mech. mixts. and a eutectic point at 6.7° and 97.6%. Solid solns. are practically absent. I-myristic and I-lauric acids form amorphous solid solns. of the 3rd type. The min. is at 39.5° and 78.7% and 20.7° and 72.3%, resp. The mixed crystals are very stable and do not disintegrate in the process of cooling. I-elaidic acid shows the presence of solid solns. of considerable concn., but only with a break and a eutectic point on the temp.-concn. diagram. The max. concns. are 14 and 88.7%. The eutectic point is at 20.1° and 75.5%. I-cholesterol and I-phytosterol form solid solns. of high max. concns., which undergo linear interruption. The related values in the 1st system are 14 and 92% and the eutectic point at 45.4° and 19.3%, and in the 2nd system 17 and 89.4% and 42.6° and 96%. I-camphor shows solid solns. of considerable concns., viz., 11.5 and 93.5%. The eutectic point is at 58.5° and 12%. I-C$_{10}$H$_{21}$I forms a mech. mixt. and a eutectic point at 47.8° and 26.6%. Solid solns. are absent. I-salicylic acid and I-Ba(OH)$_2$ form mech. mixts. and eutectic points at 54.7° and 19.5% and 58.5° and 12%, resp. Fifty references. C. B.

A58-5L A METALLURGICAL LITERATURE CLASSIFICATION



CA

VINOGRADOVA, A-D.

2

Solid solutions in systems of disubstituted benzene derivatives. A. D. Vinogradova and N. N. Efremov (Inst. Gen. Inorg. Chem., Acad. Sci. U.S.S.R., Moscow). *Ann. secteur anal. phys. chim., Inst. chim. gén.* (U.R.S.S.) 14, 211-26(1941).—The purpose was to check the results of other investigators on the formation of solid solns. by org. compds. *p*-$C_6H_4ClNO_2$ (I) and *p*-$C_6H_4BrNO_2$ (II) formed 2 series of solid solns. merging into each other. The phase diagrams of these compds. belong to the 4th type of the Roozeboom classification. I and *p*-$C_6H_4Cl_2$ (III) form continuous solid solns. of type 3 with a min. at 49° when it contains 78.5 wt. % of III. I and *p*-C_6H_4ClBr (IV) form continuous solid solns. of type 3. They have a min. of 80.6° when they contain 78 wt. % of IV. I and *p*-$C_6H_4Br_2$ (V) form 2 chem. compds. One of these is of variable compn. and is characterized by a max. (on the melting curve) of 78.7°. It forms solid solns. with a V content of 40–55 wt. %. Its compn. is not in accordance with the rule of simple proportions and corresponds to an approx. mol. ratio of 2:1. The 2nd compd. melts with decompn. and has a transition point at 75.2° when it contains 70 wt. % of V. The coördinates of the eutectic are 74.4° and 72.5 wt. % of V. II and III form a eutectic m. 52° 80 wt. % of III. II and IV form a eutectic m. 62.7° 81.5 wt. % of IV. II and V form a eutectic m. 85.5° 81.5 wt. % of V. Solid solns. of considerable concn. were not observed in the last three systems. 1,2,4-$C_6H_3Cl(NO_2)_2$ and 1,2,4-$C_6H_3Br(NO_2)_2$ form continuous solid solns. of type 1. The liquidus line of this system has a bend, the solidus line is a smooth slightly concave curve. The max. interval between these 2 lines is approx. 60 wt. % of the chlorodinitrobenzene.

M. Hoseh

CA

VINOGRADOVA, A. D

2

Equilibrium in systems phenol-piperidine and piperidine-quinoline. A. D. Vinogradova and N. N. Efremova. (Polygraphic Inst., Moscow). *Invest. Sektora Fiz.-Khim. Anal., Inst. Obshchei i Neorg. Khim., Akad. Nauk S.S.S.R.* 13, 58-67(1947).—The mixts. were subjected to thermal analysis, sp. gr., and viscosity detn. In the phenol-piperidine mixt. were found 2 singular points. One, $3C_6H_5OH$-$C_5H_{11}N$, had a dystectic point 49.3° and the other, C_6H_5OH-$C_5H_{11}N$, had a dystectic point 18.5°. The sp. gr. isotherms had maxima at 10-17% piperidine. The viscosity isotherms had clearly expressed max. at around 30% of $C_5H_{11}N$. The singular pois. C_6H_5OH-$C_5H_{11}N$ was not reflected on the viscosity curves. Thermal analysis of piperidine-quinoline revealed that during crystn. mech. mixts. are formed. A eutectic point −45.4° was observed at 62 mol. % quinoline. The sp. gr. isotherms of this system were very close to straight lines. The viscosity isotherms, slightly concave at first, straightened out at higher temps. M. Hosch

VINOGRADOVA, A. D.

USSR/Chemistry-Lead, Thorium Systems

Jan/Feb 52

"Physicochemical Analysis of Systems of Importance to Analytical Chemistry. XX. The Solubility of Precipitates in Complex (Really Existing) Analytical Systems," I. V. Tananayev, I. B. Misetskaya, A. D. Vinogradova, Inst of Gen and Inorg Chem, Acad Sci USSR.

"Zhur Analit Khim" Vol. VII, No. 1, pp 14-20

Studied soly in the system $PbSO_4$ - $Th(NO_3$ - Li_2SO_4 - H_2O at 25°C. The Debye-Hueckel formula for calcg the soly of $PbSO_4$ is not suitable for this system, because of the marked chem interaction accompanied by formation of ions of the type $ThSO_2^{2+}$. Considers the importance of physicochem analysis for theory and practice of pptn reactions, and a deagram shows the following types of ternary systems: ppt -electrolyte with common ion - water, embracing all possible systems with ppts in dependence on the ion type of the components and the character of the process of interaction in the system.

(CA 47 no. 19: 9849 '53)

PA 209T8

VINOGRADOVA, A. D.

VINOGRADOVA, A. D.= "The formation of certain fluorometallates in solution." Acad Sci USSR. Inst of General and Inorganic Chemistry imeni N. S. Kurnakov. Moscow, 1956. (Dissertations for the Degree of Candidate in Chemical Sciences).

SO: Knizhnaya Letopis' No. 22, 1956

VINOGRADOVA, A. D.

"Formation of Some Complex Fluorides in Solution," dissertation for the degree of Candidate of Chemical Sciences by A. D. Vinogradova, Moscow Engineering-Physics Institute, Zhurnal Neorganicheskoy Khimii, Vol 1, No 10, Oct 56, p 2429

It has been shown that the high solubility of difficulty soluble fluorides such as CaF_2, LaF_3, and ThF_4 in solutions of salts of aluminum, beryllium, ferric iron, and zirconium is based on the formation of ions which do not readily dissociate, namely, AlF_2^+, BeF^+, and FeF_2^+, and of $ZrOF_2$. On the basis of the results obtained, a method has been developed for the direct determination of the composition of fluorides that are formed and for estimating on the basis of changes in the curve of the solubility of CaF_2 the degree of disscciation and composition of individual compounds e.g., thiocyanates, tartrates, and citrates, of Al and Fe^{3+}.

[Comment: The data on the behavior of fluorides of thorium, lanthanum, beryllium, and zirconium which have been obtained in the work described may be of value in connection with the purification of thorium, elimination of lanthanum from nuclear fuel, and processing of beryllium and zirconium that are to be used in nuclear reactors.]

Sum 1274

VINOGRADOVA, A.D.

TANANAYEV, I.V.; VINOGRADOVA, A.D.

Composition and stability of fluoaluminates in solutions. Zhur. neorg. khim. 2 10:2455-2467 O '57. (MIRA 11:3)
(Fluoaluminates) (Solution (Chemistry))

KLYACHKO, I.R.; VINOGRADOVA, A.D.

Determination of the amount of zinc in nickel electrolytes.
Zav. lab. 24 no.5:540-541 '58. (MIRA 11:6)

1. Moskovskiy politekhnicheskiy institut.
(Zinc—Analysis) (Electrolytes—Analysis)

KLYZCHKO, I.R., prof.; BELOZERSKIY, I.V., dotsent; VINOGRADOVA, A.D., kand.-khim.nauk; KOVAL'SKAYA, M.Ye.; Prinimali uchastiye: MOISEYENKO, T.N.; VERZHBITSKAYA, M.Ye.

Using a semimicromethod to study zinc, nickel, iron, and copper impurities in type metal. Nauch. trudy MPI no.7/8:207-225 '58. (MIRA 14:12)

(Type and type founding) (Chemistry, Analytic--Qualitative)

5(2),5(3)
AUTHORS: Tananayev, I. V., Vinogradova, A. D. SOV/75-14-4-20/30

TITLE: Determination of Aluminum in Solutions Containing Fluorine Ions by Means of 8-Hydroxyquinoline

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 4, pp 487-488 (USSR)

ABSTRACT: Aluminum ions form with fluorine ions little dissociating complex ions. Of these ions $[AlF]^{2+}$ ($K_{[AlF]^{2+}} = 5 \cdot 10^{-6}$) and $[AlF_2]^{+}$ ($K_{[AlF_2]^{+}} = 8.7 \cdot 10^{-10}$) are the most stable. Therefore the conventional reagents to aluminum do not react when the solution contains fluorine ions. Table 1 shows the influence of the concentration of fluorine ions on the precipitability of aluminum with 8-hydroxyquinoline. The precipitation was carried out in all cases in an acetate-buffered solution; the fluorine ions were added in the form of NH_4F. The precipitation is no longer quantitative already at the molar ratio F : Al = 1 : 4 . At the ratio F : Al = 1 : 1 no precipitate is formed as the whole aluminum is bound as $[AlF]^{2+}$. Evaporation of the fluorine ions

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with sulfuric acid or perchloric acid takes very much time. The bonding of the fluorine ions with tartaric acid proved to be successful only in acid solutions in which the determination of aluminum with 8-hydroxy quinoline is impossible. Polyvalent cations are also unsuitable for bonding the fluorine ions in this case as most of them are simultaneously precipitated with the aluminum by 8-hydroxyquinoline. Beryllium forms with fluorine ions the very stable complex $[BeF]^+$ ($K = 2.10^{-6}$), but beryllium does not precipitate under the precipitation conditions of aluminum with 8-hydroxyquinoline. Therefore beryllium ions are suitable for bonding fluorine ions in the precipitation of aluminum. Table 2 lists the results of several aluminum determinations with 8-hydroxyquinoline in the presence of fluorine ions and beryllium ions. The ratio F : Al was 1 : 1. Aluminum is almost quantitatively precipitated by 8-hydroxyquinoline already at the molar ratio of Be : Al = 1 : 2. The precipitation is quantitative at the ratio Be : Al = 1 : 1 .

Determination of Aluminum in Solutions Containing Fluorine Ions by Means of 8-Hydroxyquinoline

SOV/75-14-4-20/30

In this precipitation obviously the following reaction takes place:

$$AlF^{2+} + 3\ Ox + Be^{2+} \longrightarrow \downarrow Al(Ox)_3 + BeF^{+}.$$

Even large quantities of beryllium in the solution do not disturb the determination of aluminum. There are 2 tables.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova AN SSSR, Moskva (Institute of General and Inorganic Chemistry, imeni N. S. Kurnakov, AS USSR, Moscow)

SUBMITTED: November 27, 1958

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5.2400(B)

~~5(2)~~

58226
S/078/60/005/02/014/045
B004/B016

AUTHORS: Tananayev, I. V., Vinogradova, A. D.

TITLE: On Composition and Stability of Complex Fluoferrates and Fluoberyllates in Solution on the Basis of Data of the Solubility Method

PERIODICAL: Zhurnal neorganicheskoy khimii, 1960, Vol 5, Nr 2, pp 321-326 (USSR)

ABSTRACT: In the paper of reference 1, the authors investigated the solubility in the system CaF_2 - AlX_3 - H_2O (X = anion), and detected the formation of the ion AlF_2^+. They report now on the solubility of CaF_2 in solutions of salts of beryllium and trivalent iron according to the same method. The Fe solutions contained 0.01 mol/l excess of the corresponding mineral acid to prevent the precipitation of basic salts. System CaF_2 - $Fe(NO_3)_3$ - H_2O (Table 1, Fig 1): The solubility of CaF_2 increases considerably in the presence of the Fe salt. Mainly, the FeF_2^+ ion is formed whereas the concentration of FeF_3 and $[FeF_6]^{3-}$ remains

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On Composition and Stability of Complex Fluoferrates and Fluoberyllates in Solution on the Basis of Data of the Solubility Method

S/078/60/005/02/014/045
B004/B016

low. System CaF_2 - $FeCl_3$ - H_2O (Table 2, Fig 2): The solubility of CaF_2 is lower than in the one described previously owing to the lower dissociation of $FeCl_3$. System CaF_2 - $Fe_2(SO_4)_3$ - H_2O: This system could only be investigated in a very narrow range of concentration since gypsum precipitates in iron sulfate concentrations of more than 0.01 mol/l. System CaF_2 - $Fe(NO_3)_3$ - - NaF - H_2O (Table 3, Fig 3): Increasing additions of NaF reduce the solubility of CaF_2. System CaF_2 - $Fe(NO_3)_3$ - NH_4SCN - H_2O: The addition of NH_4SCN reduces the solubility of CaF_2 owing to the formation of the less dissociated ion $FeSCN^{2+}$. System CaF_2 - $Be(NO_3)_2$ - $NaF(BeF_2)$ - H_2O (Tables 5,6, Figs 5,6): In these two systems, the solubility of CaF_2 decreases with increasing content of BeF_2 or NaF in the solution. The reaction

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68226

On Composition and Stability of Complex Fluoferrates and Fluoberyllates in Solution on the Basis of Data of the Solubility Method

S/078/60/005/02/014/045
B004/B016

between CaF_2 and Be^{2+} proceeds in two stages:
$2Be^{2+} + CaF_2 \rightarrow 2BeF^+ + Ca^{2+}$; $2BeF^+ + CaF_2 \rightarrow 2BeF_2 + Ca^{2+}$.
The authors point out that the solubility method gives good results when investigating complex formations in solutions. Especially informative is the introduction of another addendum (BeF_2, NaF) into the system since by means of this the gradual complex formation may be investigated. The following instability constants were determined: $K_{Fe_2F^{2+}} = 1.10^{-5}$; $K_{FeF_2^+} = 1.2 \cdot 10^{-2}$; $K_{BeF^+} = 2.3.10^{-6}$; $K_{BeF_2} = 4.10^{-5}$. The solutions of the salts of trivalent Fe dissolve the difficultly soluble fluorides just as well as the solutions of the salts of Al and Be. The authors quote E. N. Deychman, A. K. Babko, and K. Ye. Kleyner. There are 6 figures, 6 tables, and 9 references, 5 of which are Soviet.

SUBMITTED: November 29, 1958
Card 3/3

KLYACHKO, I.R.; VINOGRADOVA, A.D.; KOVAL'SKAYA, M. Ye.

Determining iron and manganese content in photographic developers. Zhur. nauch. i prikl. fot. i kin. 6 no.1:61-62 Ja-F '61. (MIRA 14:3)

1. Moskovskiy poligraficheskiy institut.
(Photography—Developing and developers)

VINOGRADOVA, A.D.; KOVAL'SKAYA, M.Ye.; SHEBERSTOV, V.I.

Determining copper content of photographic gelatins. Zhur. nauch.i prikl. fot.i kin 6 no.6:450-452 N-D '61. (MIRA 15:1)

1. Moskovskiy poligraficheskiy institut.
(Photographic emulsions--Testing)

OVECHKINA, T.G.; VINOGRADOVA, A.D.; SHEBERSTOV, V.I.

Photometric equivalent of the developed silver of technical photographic films. Zhur.nauch.i prikl.fot.i kin. 7 no.6:467-469 N-D '62. (MIRA 15:12)

1. Moskovskiy poligraficheskiy institut.
(Photographic sensitometry)

KHALFEN, Sh.S., prof.; TAGIYEVA, N.B., kand.med. nauk; VINOGRADOVA, A.G.

Importance of determining the activity of transaminases, aldolase, phosphatase, and the heterohemagglutination reaction in some forms of Botkin's disease. Sov.Med. 27 no.7:102-105 Jl'63. (MIRA 16:9)

1. Iz Kliniki infektsionnykh bolezney (zav. - prof. Sh.S. Khalfen) Azerbaydzhanskogo instituta usovershenstvovaniya vrachey.
(HEPATITIS, INFECTIOUS) (ENZYMES)
(BLOOD--AGGLUTINATION)

VINOGRADOVA, A.G.

Hemagglutination reaction with rooster erythrocytes in the diagnosis of nonicteric and atypical forms of Botkin's disease. Zhur. mikrobiol., epid. i immun. 41 no.3:56-59 Mr '64. (MIRA 17:11)

1. Azerbaydzhanskiy institut usovershenstvovaniya vrachey.

VINOGRADOVA, A.G., aspirant

Blood serum protein fractions in patients with anicteric and aborted forms of Botkin's disease. Azerb. med. zhur. 40 no.11:16-21 N '63. (MIRA 17:10)

VINOGRADOVA, A.I.

Outlook for using orthochromatic film in aerial photography.
Trudy Lab.aerometod. 4:156-159 '55. (MLRA 9:2)
(Photography, Orthochromatic) (Photography, Aerial)

VINOGRADOVA, A.I.

Vegetation and soil study by means of aerial photography in different spectral zones. Geog.sbor. no.7:59-74 '55.
(MLRA 9:1)

(Photography, Aerial) (Aeronautics in forestry)

VINOGRADOVA, A.I.; DEMINA, V.V.

Methods of interpreting aerial photographs of idle and virgin lands. (MIRA 10:1)
Trudy Lab.aerometod. 5:139-156 '56.
(Photographic interpretation) (Reclamation of land)

VINOGRADOVA, A.I.

Some data on interpretation of aerial photographs abroad. Trudy Lab.aerometod. 5:172-184 '56. (MLRA 10:1)
(Photographic interpretation)

VINOGRADOVA, A.I.

PA - 2505

AUTHOR: WINOGRADOWA,A.I., cand.geogr.sc.

TITLE: Aerialphotographs and their Use in Economy. (Administrative Conference, Leningrad). (Aeros'iemka i ieie primeneniie v narodnom khosiaistve, Meshduwedomstvennoie soveshchanie v Leningrade, Russian).

PERIODICAL: Vestnik Akademii Nauk SSSR, 1957, Vol 27, Nr 2, pp 109 - 111 (U.S.S.R.)

Received: 5 / 1957 Reviewed: 6 / 1957

ABSTRACT: In the course of the past 10 years the scope of air-photogrammetry for scientific and industrial purposes has developed considerably. Work hitherto performed in this field proved the economy of this method for geological and geobotanical research. Also for technical research these methods were found to be of importance. From the 25 November to the 1 December 1956 a Pan-soviet administrative conference was held at Leningrad, which was attended by more than 800 representatives of various institutes of the Academy of Science of the U.S.S.R. as well as of the Academies of the allied Soviet Republics; besides, 17 ministries and other scientific and industrial organizations were represented. Nearly the half of all reports was read at plenary sessions, while the rest were dealt with at sectional conferences.

G.Kell, corresponding member of the Academy of Scinece, first spoke about development during the period between the first (1929) and

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the present conference on aerial photography. Also A.I.Bulanowa (Department for geodesy and cartography) delivered a detailed report on the subject of the successful mapping of the territory of the U.S.S.R. in a scale of 1:100000. Cartography on a large scale necessitates the production of inexpensive, small, but very accurate universal instruments, i.e. instruments for the transformation of central projection into orthogonal projection, for the improvement of the present basis for the construction and production of photogrammatical devices. Besides, it is necessary to provide for the proper selection of material for aerophotography. W.J.Mikhaljov spoke about measures to be taken for the proper storing of material and apparatus. Dr. of chemical science Ljalikov spoke about the sharpness of aerial photographs. He emphasized that sharpness can be obtained by means of objectives without central spots and by means of developing machines for films.

C.J.Romanowskij spoke about the most important achievements of aerial photography for organizatorial purposes. He pointed out that, with respect to the production of apparatus for photogrammetry the U.S.S.R. lagged behind a number of capitalist countries.

W.P.Miroshnichenko, cand.geol. and mineralog.sc., stressed the

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necessity of extending test investigations in connection with aerial methods. A number of reports dealt with the utilization of pictures taken from the air for geomorphological research in connection with the study of soil and forests, and also with the use of aerial methods in the fields of hydrology and hydrography.

N.A.Sokolowa, cand.tech.sc. gave a report about the Congress of the Photogrammatical Society which took place at Stockholm and spoke about the great achievements made in foreign countries within the field of aerial photography.

A resolution was accepted which criticized conditions in the U.S.S.R.

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED:
AVAILABLE: Library of Congress.

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23(0)
AUTHOR: Vinogradova, A. I.

SOV/30-59-3-50/61

TITLE: Coordination of Research Work in the Field of Air Phototopography (Koordinatsiya issledovaniy v oblasti aeros"yemki)

PERIODICAL: Vestnik Akademii nauk SSSR, 1959, Nr 3, p 128 (USSR)

ABSTRACT: For the purpose of coordinating research work an interdepartmental committee for air phototopography has been established at the Otdeleniye geologo-geograficheskikh nauk Akademii nauk SSSR (Department of Geological-Geographical Sciences of the Academy of Sciences, USSR). N. G. Kell', Corresponding Member, Academy of Sciences, USSR, was appointed chairman. Among the members of the committee there are representatives of various Institutes of the AS USSR, a number of ministerial and public organizations dealing with the elaboration of aerial methods and their application in geology and geography, as well as organizations which produce aerial cameras and photographic films. The main task to be performed by the committee consists in promoting the development of scientific research work and facilitating the scientific-technical application of the aerial method in geological-geographical investigations. From November 17 to 18, 1958, a plenary meeting of the committee was held at Leningrad, which discussed problems of mutual information to be

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exchanged among institutes and authorities with respect to working plans. In 1958 the committee sent a list of data and material concerning the elaboration and application of aerial methods to all interested institutes. It was decided that such bulletins be published annually on September 1. It was further decided that the work of developing aerial photography be carried out in the Laboratoriya aerometodov Akademii nauk SSSR (Laboratory for Aerial Methods of the AS, USSR). For the purpose of coordinating investigations in the field of the economy and organization of aero-geodetic work a special subcommittee was formed.

AUTHOR: Vinogradova, A. I., Candidate of Geographical Sciences

S/030/60/000/03/030/044
B015/B007

TITLE: Scientific Research Work in the Field of Air Survey Methods

PERIODICAL: Vestnik Akademii nauk SSSR, 1960, Nr 3, pp 99 - 100 (USSR)

TEXT: On December 10 and 11, 1959 a plenary session of the Mezhduvedomstvennaya komissiya po aeros"yemke (Interdepartmental Commission for Air Survey) was held at Leningrad. It was attended by representatives of 30 scientific institutions and offices. The plenary session dealt with investigations in connection with the elaboration of methods of air survey in the Institutes of the Akademiya nauk SSSR (Academy of Sciences of the USSR) and the Academies of Sciences of the Union Republics. A number of urgent problems was outlined which must be investigated jointly by various institutes. The necessity of establishing a general State — controlled fund for aerial photography was stressed. Also bibliographic lists of works published in Russia and abroad on methods of air survey should be compiled. The collaborators of various institutions dealing with this field are intended to attend a course of instruction at the Laboratoriya aerometodov Akademii nauk SSSR (Laboratory for Methods of Air Survey of the Academy of Sciences of the USSR).

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VINOGRADOVA, A.I.

Landscape mapping based on the interpretation of aerial photographs (taking as an example the shore area of Tsimlyansk Reservoir). Trudy Lab. aerometr. 10:170-177 '60. (MIRA 14:1)
(Tsimlyansk Reservoir region—Maps)
(Photographic interpretation)

S/030/61/000/003/006/013
B105/B215

AUTHOR: Vinogradova, A.I. Candidate of Geographical Sciences

TITLE: Interdepartmental Committee for Aerial Photography

PERIODICAL: Vestnik Akademii nauk SSSR, no. 3, 1961, 107

TEXT: The extended plenary meeting of the Mezhduvedomstvennaya komissiya po aeros"yemke (Interdepartmental Committee for Aerial Photography) was held in Leningrad from December 15 to 17, 1960 at the Otdeleniye geologo-geograficheskikh nauk Akademii nauk SSSR (Department of Geological and Geographical Sciences of the Academy of Sciences USSR). It was attended by members of the committee and representatives of a number of interested institutions and departments. Kell' N.G., Chairman of the Committee, Corresponding Member AS USSR reported on the main problem of the agenda: prospects of development in aerial photographs and aeromethods. He also took into account the data presented by a number of leading institutions and experts on the chief sections of aerial photography. Furthermore, representatives of scientific research institutes of the country reported on work carried out or planned in the fields of aerial photography and aero-

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Interdepartmental Committee ...

methods. It was found that aeromethods at present are being applied for scientific research work and for the solution of various problems of national economy, especially in cartography and the exploration of natural resources and cosmic space. The resolutions adopted by the plenary meeting showed the chief trends in the field of aerial photography and aeromethods, whose development is tc be aimed at, especially that of theoretical aerial photography, general theory, and methods of deciding. The photographic material has to be improved and the methods of aerial photography and processing of its material by applying electronics and radiotechnology have to be mechanized. New apparatus and equipment, and new methods of producing topographic and special maps have to be found, and the traditional methods have to be improved. The possibilities of applying aeromethods for the exploration of cosmic space still have to be studied.

ACCESSION NR: AT4043132 S/0000/64/000/000/0056/0089

AUTHOR: Vinogradova, A. I.(Member of aerial methods laboratory); Kobets, N. V. (Member of aerial methods laboratory)

TITLE: Landscape indicators of Quaternary deposits and preparation of an air photo key

SOURCE: AN SSSR. Laboratoriya aerometodov. Kompleksnoye deshifrirovaniye aerosnimkov (Complex interpretation of aerial photographs). Moscow, Izd-vo Nauka, 1964, 56-89

TOPIC TAGS: geology, Quaternary deposit, aerial photograph, photogrammetry, air photo interpretation

ABSTRACT: The Laboratoriya aerometodov (Aerial Methods Laboratory) has been developing methods for the evaluation of terrain from the engineering geology point of view. Successes have been attained in the interpretation of Quaternary deposits in the European SSSR, and effective methods for the office interpretation of such photographs have been developed. The work has been done primarily in regions of ancient continental glaciation which have long been occupied and accordingly greatly modified by human activity. It has been found that the possible types and general character of Quaternary deposits can be judged on the basis of association with a particular morphogenetic type of relief, as established by air photo interpretation.

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It is assumed that within a particular morphogenetic type of relief identical relief forms are made up of identical deposits. The material and thickness of the Quaternary deposits is interpreted on the basis of their interrelationship with other landscape components, especially vegetation, soil and underlying rocks; the interpretation of Quaternary deposits is therefore based on the structure of the landscape as a whole and the structure of its individual morphological units. Using this method, the Aerial Methods Laboratory has begun preparation of an interpretation key for the lithological-genetic types of Quaternary deposits in the European SSSR. The article is accompanied by 58 standard aerial photographs, representing various Quaternary deposits on a background of various environmental components; a 30-page key accompanies the text. Orig. art. has: 58 figures and 1 table.

ASSOCIATION: Laboratoriya aerometodov (Aerial Methods Laboratory)

SUBMITTED: 28Jan64 ENCL: 00

SUB CODE: ES NO REF SOV: 000 OTHER: 000

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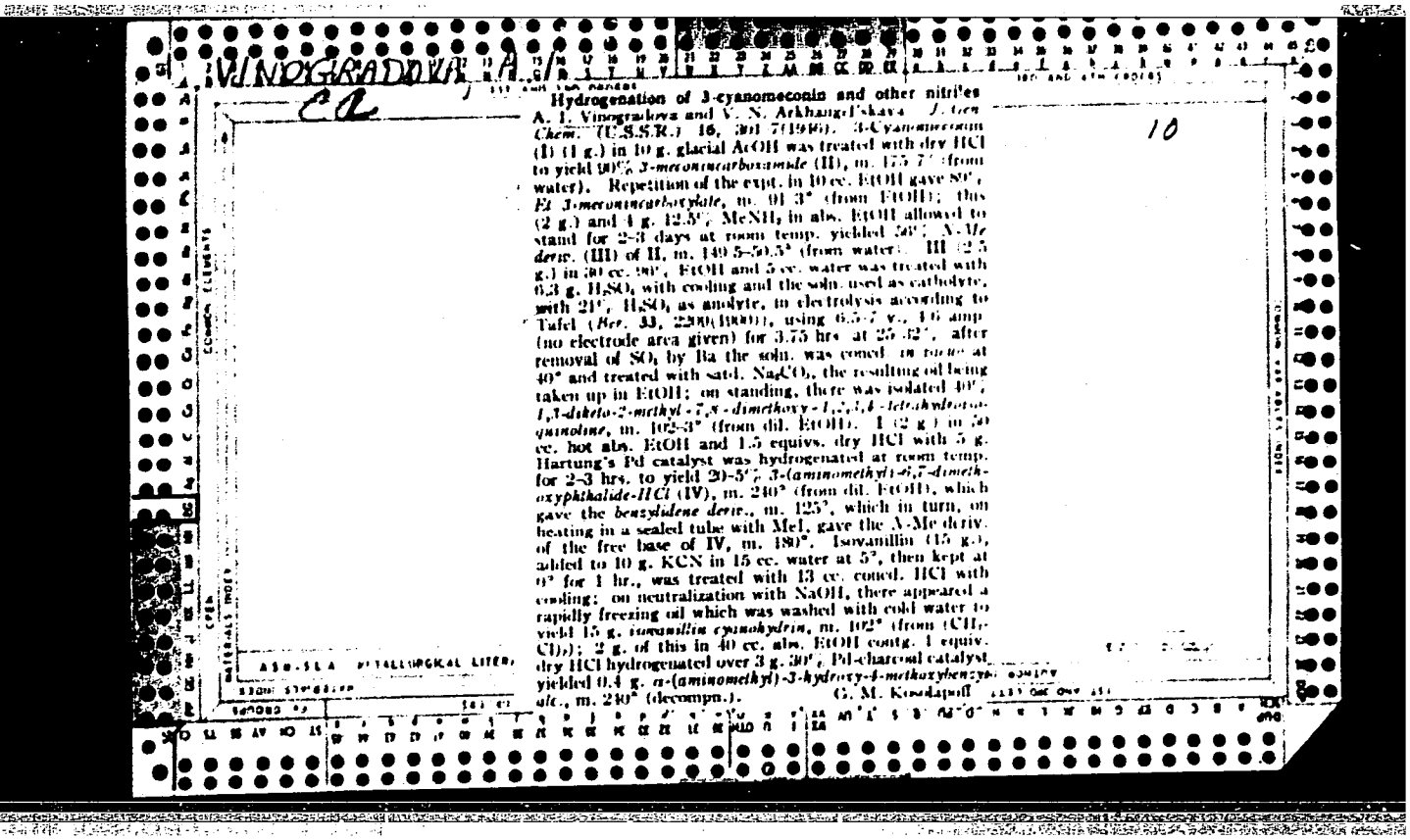
VINOGRADOVA, A. I.

Vinogradova, A. I. - "On the problem of the functional condition of the liver during acute brucellosis," Trudy Omskogo med. in-ta im. Kalinina, No. 10, 1948, p. 227-31

SO: U-3600, 10 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 6, 1949)



VINOGRADOVA, A.

C2

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Hydrogenation of 3-cyanomeconin and other nitriles

A. I. Vinogradova and V. N. Arkhangel'skaya. *J. Gen. Chem. (U.S.S.R.)* 16, 301-7(1946). 3-Cyanomeconin (I) (1 g.) in 10 g. glacial AcOH was treated with dry HCl to yield 90% *3-meconinecarboxamide* (II), m. 175-7° (from water). Repetition of the expt. in 10 cc. EtOH gave 80% *Et 3-meconinecarboxylate*, m. 91-3° (from EtOH); this (2 g.) and 4 g. 12.5% MeNH$_2$ in abs. EtOH allowed to stand for 2-3 days at room temp. yielded 50% *N-Me deriv.* (III) of II, m. 149.5-50.5° (from water). III (2.5 g.) in 30 cc. 90% EtOH and 5 cc. water was treated with 6.3 g. H_2SO_4 with cooling and the soln. used as catholyte, with 21% H_2SO_4 as anolyte, in electrolysis according to Tafel (*Ber.* 33, 2230(1900)), using 6.5-7 v., 1.6 amp. (no electrode area given) for 3.75 hrs. at 25-32°, after removal of SO_2 by Ba the soln. was concd. *in vacuo* at 40° and treated with satd. Na_2CO_3, the resulting oil being taken up in EtOH; on standing, there was isolated 40% *1,3-diketo-2-methyl-7,8-dimethoxy-1,2,3,4-tetrahydroisoquinoline*, m. 102-3° (from dil. EtOH). I (2 g.) in 50 cc. hot abs. EtOH and 1.5 equivs. dry HCl with 5 g. Hartung's Pd catalyst was hydrogenated at room temp. for 2-3 hrs. to yield 20-5% *3-(aminomethyl)-6,7-dimethoxyphthalide-HCl* (IV), m. 240° (from dil. EtOH), which gave the *benzylidene deriv.*, m. 125°, which in turn, on heating in a sealed tube with MeI, gave the N-Me deriv. of the free base of IV, m. 180°. Isovanillin (15 g.), added to 10 g. KCN in 15 cc. water at 5°, then kept at 0° for 1 hr., was treated with 13 cc. concd. HCl with cooling; on neutralization with NaOH, there appeared a rapidly freezing oil which was washed with cold water to yield 15 g. *isovanillin cyanohydrin*, m. 102° (from CH_2Cl_2); 2 g. of this in 40 cc. abs. EtOH contg. 1 equiv. dry HCl hydrogenated over 3 g. 30% Pd-charcoal catalyst, yielded 0.4 g. *α-(aminomethyl)-3-hydroxy-4-methoxybenzyl alc.*, m. 240° (decompn.).

G. M. Kosolapoff

SOV/48-23-9-26/57

24(7)

AUTHORS: Butslov, M. M., Vinogradova, A. K., Ivantsov, L. M., Kutuzova, G. N., Mandel'shtam, S. L.

TITLE: A Photoelectric Stylometer With Visual Control of the Position of Invisible Lines of the Spectrum

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 9, pp 1110 - 1112 (USSR)

ABSTRACT: By replacing the glass-dispersion optical system by a quartz- (Fig 1) or diffraction optical system (Fig 2), the range of applicability of the FES-1-type stylometer may be considerably extended, especially if, by means of an electron-optical converter, the invisible lines of the spectrum may be detected. Two variants of the type FES were developed and tested by the authors; the converter operates with an antimony-cesium-cathode; the device has an uv-transmissive window, so that a visual observation of the spectrum within the wave length range of 6000-2400 Å is possible. Figures 1 and 2 show the course of rays in these two instruments, in which the shifting of the spectrum with respect to the outlet slit is brought about by rotating the dispersion system. The line intensity of these

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instruments is comparable to that of instruments, the spectrum of which has a length of 200-300 Å. Next, investigation of the lines by means of the electron-optical converter is described, and for both instruments a survey of the principal characteristic features is given. The focal distances of the mirror objectives of the collimator are 600 and 750 mm respectively, the refraction angle (quartz prism) in one of the instruments is 60°, whereas the diffraction grating of the other has 600 grating lines per millimeter. The electron-optical arrangement makes it possible to observe the fine details of complicated spectra, especially of iron, and this device is said to have a great future. There are 2 figures.

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24(4) SOV/51-6-6-31/34

AUTHORS: Vinogradova, A.K. and Ivantsov, L.M.

TITLE: Raster Illuminating Devices with Cylindrical Optics (Rastrovyye osvetiteli s tsilindricheskoy optikoy)

PERIODICAL: Optika i spektroskopiya, 1959, Vol 6, Nr 6, pp 829-830 (USSR)

ABSTRACT: Raster illuminators with cylindrical lenses can be used to avoid selective radiation losses in spectral analysis. In the absence of a raster the source of light fills a collimator objective only along the vertical diameter (Fig 1a). If a raster is placed between the source and the slit it will not affect the uniformity of illumination of the slit and the way in which the objective is filled with light in the vertical direction. Raster affects strongly, however, illumination of the slit and light distribution of the collimator in the horizontal direction. Each of quasi-sources S', S'', ..., S^n produces its own zone of horizontal illumination. If necessary the focusing properties and dimensions of the raster lenses may be designed in such a way that the objective will be used fully in the horizontal direction (Fig 1b) It was found that, for the same illumination of the collimator objective in the horizontal direction, raster condenser is less sensitive to horizontal and vertical displacements of the light source than a three-lens condenser.

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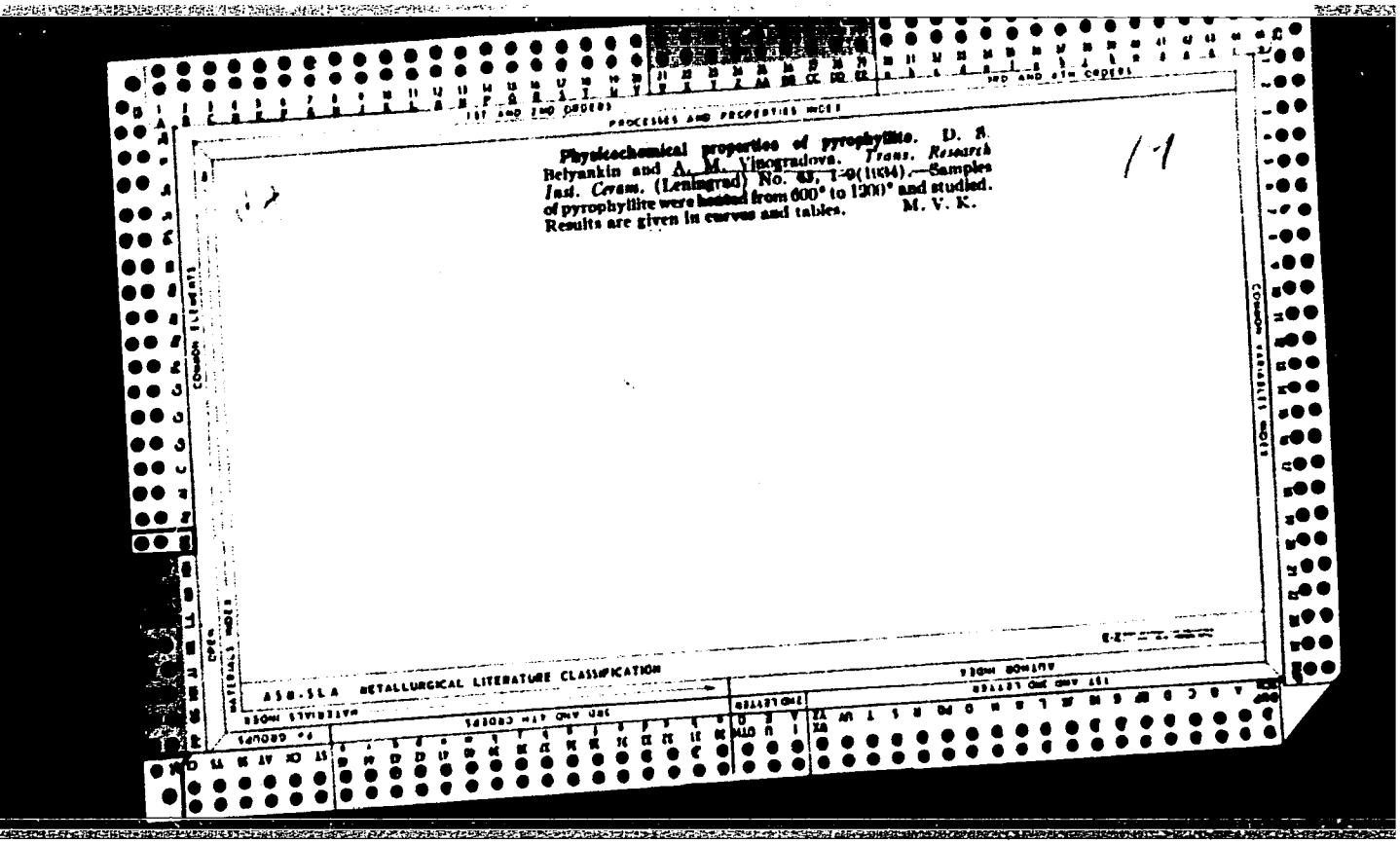
Raster Illuminating Devices with Cylindrical Optics

It follows that selective losses due to motion of the source are practically eliminated when a cylindrical-lens raster is used. Advantages of a raster illuminator with cylindrical lenses over a system using three lenses are illustrated by graphs of the distribution of blackening along the spectral lines of Fe I and Fe II at 2662 and 2665 Å (Fig 2). Fig 2a shows the blackening along iron lines obtained with a raster illuminator and Fig 2б shows the blackening along iron lines when a three-lens illuminator was used. There are 2 figures and 2 English references.

CHERNYAK, M.G.; ASLANOVA, M.S.; VOL'SKAYA, S.Z.; KUTUKOV, S.S.; SIMAKOV, D.P.; MAYDUS, G.G.; BOVKUNENKO, A.N.; KOVALEV, N.N.; SHKOL'NIKOV, Ya.A.; ZHIVOV, L.G.; KOVALEV, N.P.; KOZHUKHOVA, N.V.; KOROLEVA, A.Ye.; VINOGRADOVA, A.M.; OSIPOVA, O.M.; BADALOVA, E.I.; BRONSHTEYN, Z.I.; L'VOV, B.S.; KRYUCHKOV, N.N.; BLOKH, K.I.; MASHINSKAYA, N.I., red.

[Continuous filament glass fibers; technology fundamentals and their properties] Nepreryvnoe stekliannoe volokno; osnovy tekhnologii i svoistva. Moskva, Khimiia, 1965. 319 p. (MIRA 18:8)



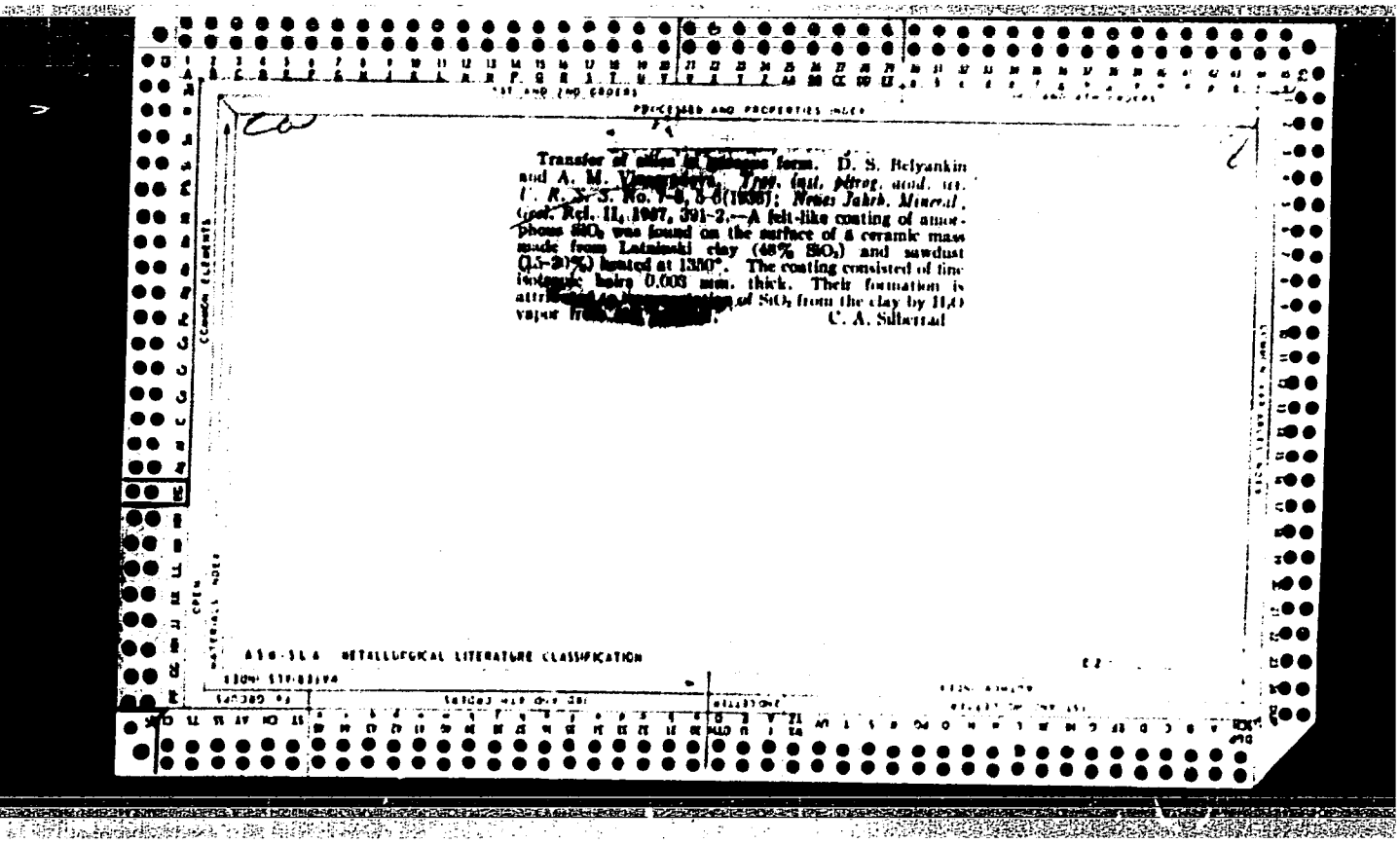
Physicochemical properties of pyrophyllite. D. S. Belyankin and A. M. Vinogradova. *Trans. Research Inst. Ceram.* (Leningrad) No. 43, 7-9(1934).—Samples of pyrophyllite were heated from 600° to 1200° and studied. Results are given in curves and tables. M. V. K.

1-1

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

VINOGRADOVA, A. M.

Belyankin, D. S., and Vinogradova, A. M. PHYSICO-CHEMICAL PROPERTIES OF PYROPHYLLITE. Trans. Research Inst. Ceram. U.S.S.R., 33, [illegible]



Transfer of silica in gaseous form. D. S. Belyankin and A. M. Vinogradova. *Trans. Inst. Petrog. Acad. Sci. U. R. S. S.* No. 1-2, 5-6 (1936); *Neues Jahrb. Mineral., Geol. Beil. Bd. II*, 1937, 391-2.—A felt-like coating of amorphous SiO_2 was found on the surface of a ceramic mass made from Latninski clay (48% SiO_2) and sawdust (0.5–2%) heated at 1300°. The coating consisted of fine fibrous hairs 0.003 mm. thick. Their formation is attributed to transportation of SiO_2 from the clay by H_2O vapor from [redacted].

C. A. Silberrad

A10-51A METALLURGICAL LITERATURE CLASSIFICATION

VINOGRADOVA, A.N.; DZHAMUSOVA, T.A.

Study of substantial and functional changes in the retractor of a Phascolosoma under prolonged thermal influence. TSitologiia 5 no.3:279-286 My-Je '63. (MIRA 17:5)

1. Laboratoriya sravnitel'noy tsitologii Instituta tsitologii AN SSSR, Leningrad.

VINOGRADOVA, A.N.

Thermostability of actomyosins in frogs as related to the seasonal and experimental decrease in muscle thermostability. Sbor.rab. Inst. tsit. no.8:115-118 '65.
(MIRA 18:12)

1. Laboratoriya sravnitel'noy tsitologii Instituta tsitologii AN SSSR, Leningrad.

VINOGRADOVA, A.N.

Heat resistance of actomyosin and myosin in two frog species. Sbor.rab. Inst. tsit. no.8:186-192 '65.
(MIRA 18:12)

1. Laboratoriya sravnitel'noy tsitologii Instituta tsitologii AN SSSR, Leningrad.

VINOGRADOVA, A.N.

Heat resistance and potimal temperature of the adenosinetri-phosphatase activity of actomyosin in the Black Sea and Barents Sea rays and crabs. Sbor. rab. Inst. tsit. no.6:189-194'63.
(ANIMALS, COLD-BLOODED) (ADENOSINETRIPHOSPHATASE)
(ACTOMYOSINS) (HEAT—PHYSIOLOGICAL EFFECT)

KUSAKINA, A. A.; VINOGRADOVA, A. N.

"Species difference in the heat resistance of protoplasmic proteins in multicellular poikilothermic animals."

UNESCO - International Symposium on the Role of Cell Reactions in Adaptations of Metazoa to Environmental Temperature.

Leningrad, USSR, 31 May - 5 June 1963

USHAKOV, B.P.; VINOGRADOVA, A.N.; KUSAKINA, A.A.

Cytophysiological analysis of the interspecific differentiation of whitefish and grayling in Lake Baikal. Zhur. ob. biol. 23 no.1:56-63 Ja-F '62. (MIRA 15:3)

1. Institut tsitologii AN SSSR, Leningrad.
(BAIKAL, LAKE--WHITEFISHES)
(BAIKAL, LAKE--GRAYLING)