BATSANOV, S.S.; ABAULINA, L.I.

Interaction of mercury halides with chalcogens. Report No.2.
Izv. Sib. otd. AN SSSR no.10:67-73 '61. (MIRA 14:12)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk.
(Mercury halides)
(Chalcogens)

ABAULINA, E. I.

USSR/Physics Crystallography FD-1836

Card 1/1 Pub 146-21/25

Author : Abaulina, E. I., and Zavaritskiy, N. V.

Title : Problem of obtaining a metastable modification of thallium

Periodical : Zhur. eksp. i teor. fiz. 28, 250, February 1955

Abstract : In order to clarify the role of the crystalline lattice in the phenomenon of superconductivity it is important to investigate the various crystalline modifications of one and the same substance at low temperatures. There are three metals (thallium, titanium, and zirconium) whose alpha-modification is superconducting, but their beta-modification at low temperatures has not been investigated. The authors attempted to obtain and study at low temperatures the metastable modification of thallium (99.98% pure); tempering was carried out by several methods. They found that one of the usual methods does not obtain thallium in its metastable modification and that thus the problem of the possibility of tempering pure thallium remains open. They thank A. I. Shal'nikov for his interest and N. V. Belov, laboratory assistant in the Institute of Crystallography, Academy of Sciences USSR, for roentgenograms.

Institution: Institute of Physical Problems, Academy of Sciences USSR

Submitted : September 27, 1954

ABAULINA, E.I.

USSR/Physics - Photo counter

FD-1840

Card 1/1 Pub 146-25/25

Author : Khaykin, M. S., and Abaulina, E. I.

Title : Self-quenching light counter with regulated red boundary

Periodical : Zhur. eksp. i teor. fiz. 28, 254-256, February 1955

Abstract : The counter of photoelectrons is a sensitive measurer of light flux. The authors devote the present work to an attempt to create a light counter with regulated spectral characteristic, such an instrument in certain problems of spectral analysis combining the roles of light receptor and spectral apparatus. The first attempt in this direction was made by V. M. Kudryatseva (ibid. 4, 557, 1939). They thank Prof. A. I. Shal'nikov for his advice.

Institution: Institute of Physical Problems, Academy of Sciences USSR

Submitted : June 29, 1954

ABAULINA-ZAVARITSKAYA

USSR/Electricity - Semiconductors

G-3

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 12184

Author : Abaulina-Zavaritskaya, E.I.

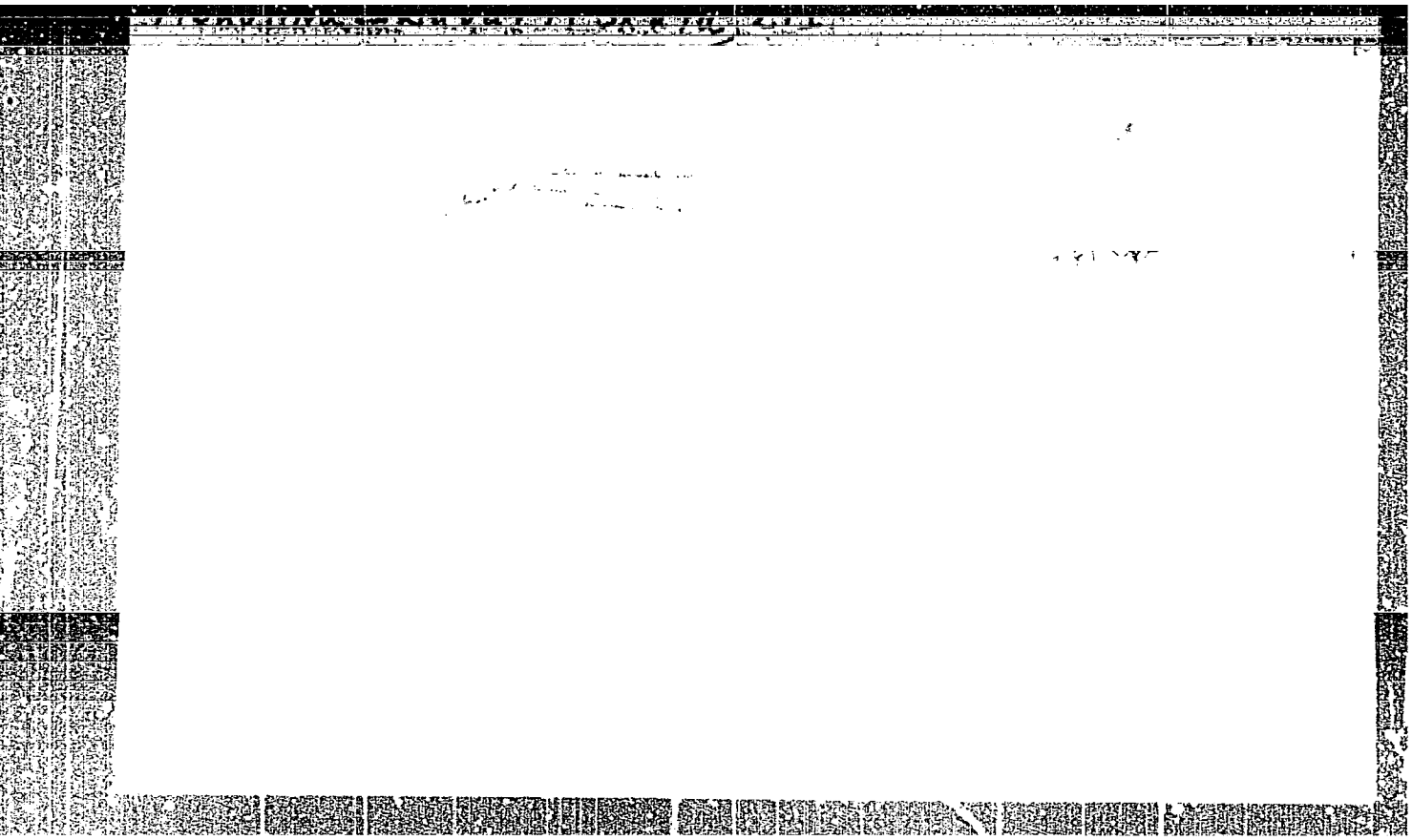
Inst : Moscow State University, USSR.

Title : Electric Properties of Germanium at Super Low Temperatures

Orig Pub : Zh. eksperim. i teor. fiziki, 1956, 30, No 6, 1158-1160

Abstract : An investigation is made of the electric resistivity (ρ) of single crystals of germanium (1 ohm-cm at 20°) on the temperature and on the intensity of the electric field in the temperature range from 0.15 to 20° K. A very low temperature is obtained by adabatic demagnetization of iron-ammonia alums. The temperature of the specimens was monitored by a calibrated carbon thermometer with accuracy to 5×10^{-3}° K. The resistance was measured with an electrometer with negative feedback and with a

Card 1/2



APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000100110012-5"

of from 1 - 6 v/cm at temperatures of from 4.5 - 6.35°K (7 curves). This dependence is found to have 3 characteristic ranges: a) the range of applicability of Ohm's law, b) the range of the monotonous increase of conductivity, and c) the range of the sudden steep increase of electric conductivity (the so-called "breakdown" region). The latter is subjected to close investigation. It was found that the breakdown effect is connected with the development of a cascade in the conduction band; it is, however, independent of the conduction mechanism in germanium at low temperatures. The other figures show the various physical connections in this region in form of diagrams; thus, figure 4 shows the curves $E_{br}(T)$, (E_{br} denotes the breakdown field strength), figures 5 and 6 show the dependence of conductivity on E, etc.

The formula $E_{br} \approx \frac{u}{\mu}\sqrt{\frac{2I}{kT}}$ or $E_{br}\mu \approx$ const holds (u denotes the velocity of sound, I the ionization energy of the impurities in germanium, and μ the mobility (Figure 9 shows the course taken by the straight line). The influence

exercised by various factors upon E_{br} is found to be due to their influence on carrier mobility. Finally, the connection between E_{br} and the resistance ρ on the magnetic field strength is investigated. The following holds: $\rho(H)/\rho(0) \approx kE_{br}(H)/E_{br}(0)$, $k = 1...4$ or $\rho(H)/\rho(0) \approx \mu(0)/\mu(H)$. The author finally thanks A. I. Shal'nikov, B. M. Vul, S. G. Kalashnikov and L. V. Keldysh for their interest and discussions, and V. G. Alekseyeva for preparing the samples. There are 10 figures, 2 tables, and 10 references, 1 of which is Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: November 10, 1958

ABAYANTSEV, A.S.: Master Geolog-Mineralo Sci (diss) --- "The tectonics of the west-Donets graben (the Novomoskovsk-Mezhevaya region of the western Donbass)". Dnepropetrovsk, 1958. 20 pp (Min Higher Educ Ukr SSR, Dnepropetrovsk Order of Labor Red Banner Mining Inst im Artem), 150 copies (KL, No 1, 1959, 116)

AMAYANTSEV, A.S.

Mineral raw material resources of the Dnepropetrovsk Province. Izv. DGI 42:20-25 '64. (MIRA 18:11)

LEVIN, G.L., kand.med.nauk; ABAYEV, A.I. (Moskva)

Use of the neuroblocking preparations gastripon and gastrobamate. Klin.med. no.7:53-56 '61. (MIRA 14:8)

1. Iz 2-y kafedry terapii (zav. - prof. B.Ye. Votchal) TSentral'nogo instituta usovershenstvovaniya vrachey (dir. M.D. Kovrigina) na baze Klinicheskoy ordena Lenina bol'nitsy imeni S.P. Botkina (glavnyy vrach - prof. A.N. Shabanov).
(PEPTIC ULCER) (AUTONOMIC DRUGS)

ABAYEV, A.S., inzh.; PODOL'SKIY, L.R., inzh. (Dnepropetrovsk).

Equipping electric locomotives on station tracks. Elek. i tepl. tiaga no.12:27-28 D '57. (MIRA 11:1)
(Electric locomotives--Maintenance and repair)

ABAYEV, A.S., inzh.

Determination of an expediency criterion in the change-over of traction motors to operation with decreased field excitation. Sbor. trud. DIIT no.39:116-120 '63. (MIRA 18:4)

EPR/EWG(j)/EWT(m)/EWP(b)/T/EWP(e)/EWP(t) Pr-4/Ps-4

TOPIC TAGS: single crystal, single crystal growing, single crystal growing device

ABSTRACT: The State Scientific Research and Planning Institute of

cial graphite heater with vertical slits which permit the direct

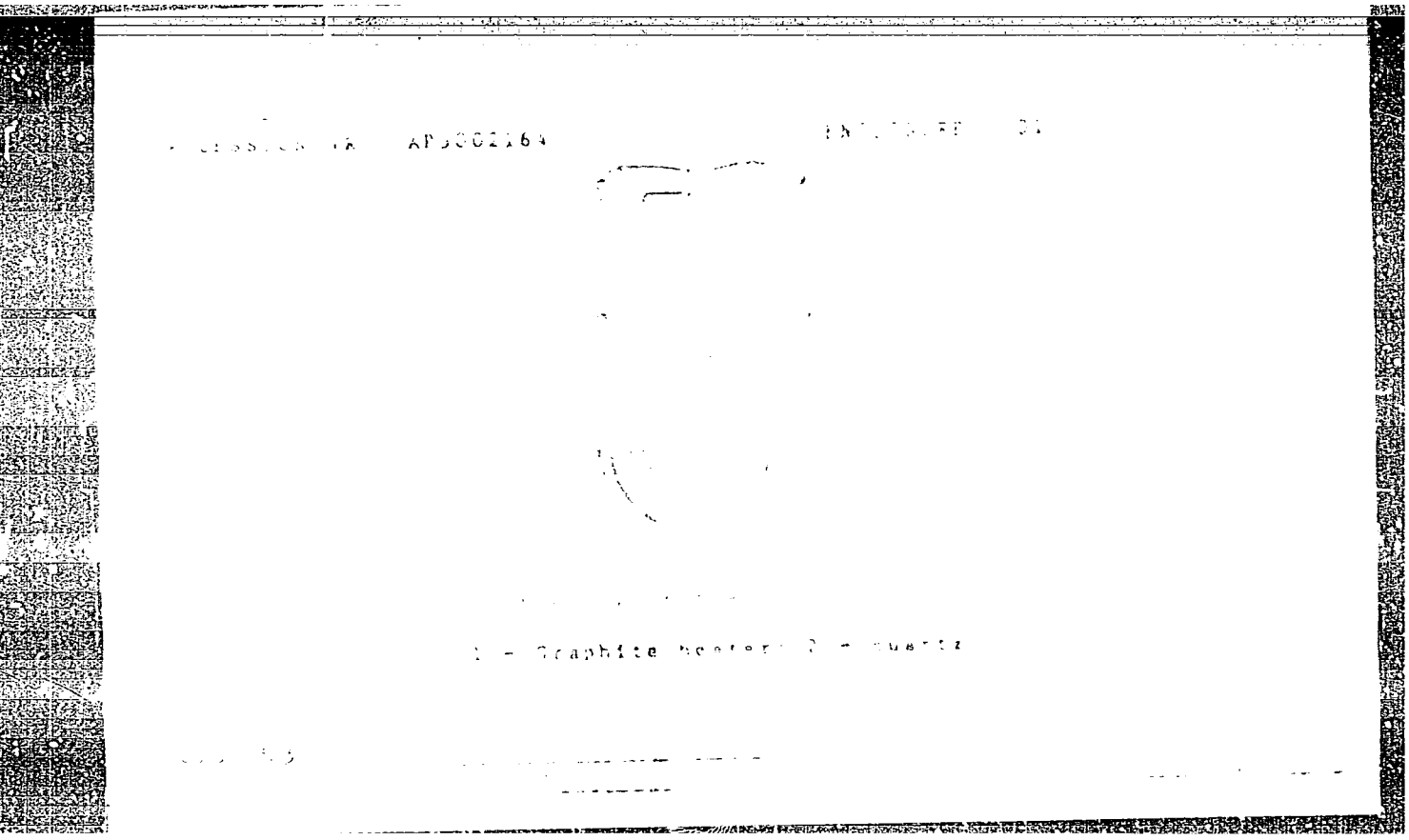
AP5002164

ASSOCIATED: Siredmat

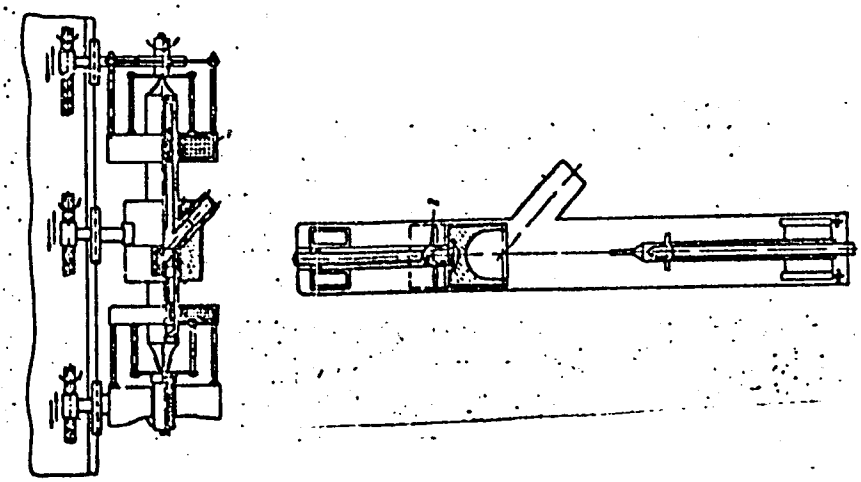
SUBMITTED: 06Dec63 ENCL: 01 SUB CODE: SS, MN

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3164

Card 2/3



ACC NR: AP7009052



1--stationary electromagnet; 2--self-adjusting needle bearing

SUB CODE: 20/ SUBM DATE: 19Apr65

Card 2/2

AGADZHANYAN, N.A., mayor meditsinskoy sluzhby, kand.med.nauk; ABAYEV, D.V., podpolkovnik meditsinskoy sluzhby

Decompression disorders under conditions of decreased atmospheric pressure. Voen.-med. zhur. no. 1:58-62 Ja '60. (MIRA 14:2)
(DECOMPRESSION SICKNESS) (ATMOSPHERIC PRESSURE--PHYSIOLOGICAL EFFECT)
(AVIATION MEDICINE)

A BAYEV, G. N.

11(4) PHASE I BOOK EXPLOITATION SOV/2925

Baku. Azerbaydzhanskiy nauchno-issledovatel'skiy institut neftepererabatyvayushchey promyshlennosti imeni V. V. Kuybysheva.

Sbornik trudov, vyp. 2. (Collection of Works, No. 2) Baku, Aznefteizdat, 1958. 373 p. Errata slip inserted. 500 copies printed.

Additional Sponsoring Agency: Azerbaydzhan. Ministerstvo neftyanoy promyshlennosti.

Ed. of Publishing House: T.B. Al'tman; Editorial Board: V.S. Aliyev, Candidate of Chemical Sciences, V.S. Gutyrya, Doctor of Chemical Sciences, A.M. Kuliyev, Doctor of Chemical Sciences, N.M. Indukov, Candidate of Technical Sciences, V.Ya. Masumyan, Candidate of Chemical Sciences, F.G. Suleymanova, Candidate of Technical Sciences, A.M. Levshina, Candidate of Chemical Sciences, N.B. Al'tman, Candidate of Chemical Sciences, I.M. Orudzheva, Candidate of Technical Sciences, N.M. Melik-Zade, Candidate of Chemical Sciences.

PURPOSE: This collection of articles is intended for chemical engineers, technicians, and refiners concerned with advanced methods of petroleum conversion.

COVERAGE: The collection presents an analysis of different types of crudes extracted in Azerbaydzhan and of the products recovered from these crudes through petroleum conversion processes. The dewatering, desalting and demulsifying of crudes is described and the suitability of these crudes for the recovery of diesel fuels is discussed. Results of catalytic cracking performed over a fluidized bed synthetic catalyst and the chemical composition of gasoline produced by two-stage catalytic cracking are analyzed. Attrition and deactivation of catalysts as well as catalyst circulation in a hyper-flow system are reviewed. Various lube oil additives and the production of different types of oils and of carbon black are outlined. References accompany individual articles.

SOV/2925

Collection of Works, No. 2

Card 7/8

ISMAYLOV, I.M.; ABAYEV, G.N.

Regulating "hyperflow" conveying systems. Sbor.trud.AzIINI MP no.21318-324 Ag '58. (MIRA 12:6)
(Conveying machinery)

5.1180,10.2000

77934
SOV/65-60-3-7/19

AUTHOR: Abayev, G. N.

TITLE: Concerning the Calculation of the Consumption of Solids During Pneumatic Conveying

PERIODICAL: Khimiya i tekhnologiya topli. i masel, 1960, Nr 3, pp 28-35 (USSR)

ABSTRACT: A linear relation was established between loss of potential energy and consumption of solid material during pneumatic conveying.

$$G = \frac{(\Delta P - \Delta P_0)}{K} Q,$$

where

$$K = \frac{W_g}{W_p}\left(1 + \frac{a}{g}\right) + \frac{2fW_g W_p}{D_{eq}},$$

The following notations were used: G is the amount of circulating solid particles (kg/hr or kg/sec); P is

Card 1/5

pressure drop in conveyor (kg/m^2); K is coefficient dimensionless); Q is consumption of transporting agent (m^3/hr or m^3/sec); W_g is linear velocity of gas in conveyor (m/sec); W_p is velocity of particles in conveyor (m/sec); l is distance between samplings of diffmanometric impulses (m); f is friction factor (dimensionless); a is acceleration of particle (m/sec^2); D_t is diameter of transporting pipe-line (m); Q_t is average concentration of solid particles in fluidized bed (kg/m^3); W_f is velocity of particle fall (m/sec); λl is the amount of particles of a given fraction; F is the cross section of transport pipe-line (m^2); γ_1 is the apparent surface of solid particles; C_x is resistance coefficient; γ_g is gas density

Card 2/3

Concerning the Calculation of the Consumption of Solids During Pneumatic Conveying

77934
SOV/65-60-3-7/19

working conditions (kg/m^3): d is viscosity of the transporting gas (kg/sec^2/m^2); K_e is coefficient K found experimentally; K_t is theoretical coefficient; g is acceleration of free fall (g = 9.8 m/sec^2). Preservation without change of the following three determining factors is a necessary condition of similarity of the fluidized bed flow:

$$\frac{W_g}{W_p},\ \frac{a}{g},\ \frac{(W_g W_p)}{D_{18}}.$$

It is inadmissible to apply the K data without considering the similar conditions. The range of the acceleration zone established experimentally for microspheres, sand and pellet catalysts in the range of transporting gas linear velocity of 7-20 m/sec never exceeds 2-5 m. The instant consumption of the solid particles can be found by experimental-analytical method from the value of the potential energy loss of the gas flow ΔP.

Card 3/5

APPROVED FOR RELEASE: 04/03/2001 CIA-RDP86-00513R000100110012-5"

(a) In the case $\frac{a}{g} \sim 0, \frac{fW_2W_f^2}{D_{fg}} \neq 0,$

(i.e., the diffmanometric measurements of pressure are located above the acceleration zone).

$$G = \frac{\Delta P}{l} \frac{F}{\left(\frac{1}{W_f} + \frac{2fW_2}{D_{fg}}\right)},$$

$$K = \frac{W_f}{W_f} + \frac{2fW_2W_f}{D_{fg}};$$

(b) In the case $\frac{a}{g} \sim 0, \frac{fW_2W_f}{D_{fg}} \neq 0,$, as it usually takes place under industrial conditions, the suggested method can be used for determining solid particles' consumption and fractional composition of the circulating solid particles.

Card 4/5

Concerning the Calculation of the Consumption of Solids During Pneumatic Conveying

77934
SOV/65-60-3-7/19

$$G = \frac{\Delta P}{l}(W_g - W_l^{[illegible]})F, \quad K = \frac{1}{1 - \frac{W_l}{W_g}}$$

For continuous control G and W_p the suggested method can be used for the designing of digital computers. In the case [illegible], it is necessary to determine limitless coefficient K from some other conditions (thermal balance, for example in order to find G from ΔP. There are 2 tables; 3 figures; and 10 references 7 Soviet, 3 U.S. The U.S. references are: Daniels, Refiner, 435 (1946); Marin, Moistad, IEC, 41, Nr 6, 1148 (1949); Vogt, Wite, IEC, 40, Nr 9, 1738 (1948).

Card 5/5

ABAYEV, G.N.; GUSMAN, T.Ya.

Determination of the rate of the beginning of fluidization of some catalysts. Khim.prom. no.11:796-798 N '62. (MIRA 16:2)
(Fluidization) (Catalysts)

DALIN, M.A., akademik; LOBKINA, V.V.; ABAYEV, G.N.; SEREBRYAKOV, B.R.; PLAKSUNOVA, S.L.

Production of acrylonitrile based on propylene and ammonia. Dokl.AN SSSR 145 no.5:1058-1060 '62. (MIRA 15:8)

1. AN Azerbaydzhanskoy SSR (for Dalin).
(Acrylonitrile) (Propene) (Ammonia)

DALIN, M.A.; SEREBRYAKOV, B.R.; MANGASARYAN, N.A.; ABAYEV, G.N.; VALLERSHTEYN, A.S.

Synthesis of acrylonitrile by oxidative ammonolysis of propylene in a fluidized catalyst bed. Azerb.khim.zhur. no.4:28-33 '65. (MIRA 18:12)

1. VNIIolefin. Submitted August 16, 1964.

ABAYEV, G.N.

Basic criterial equations and criteria of chemical kinetics.
Zhur. prikl. khim. 38 no.10:2242:2252 O '65. (MIRA 18:12)

1. Submitted Febr. 27, 1964.

NAUMETS, Nikolay Ivanovich, ispolnyayushchiy obyazannosti prof. kand. tekhn. nauk; ZHIRKOVICH, Sergey Vladimirovich, ispolnyayushchiy obyazannosti prof. kand. tekhn. nauk; ABAYEV, I.I., inzh.; PERCHENKO, A.G., st. pepod.; SHABANOV, A.D., dots., kand. tekhn. nauk, retsenzent; YUSTINSKIY, E.A., inzh., retsenzent; ANTONOV, V.P., tekhn. red.

[Hoisting machinery used in building] Gruzopod"emnye stroitel'nye mashiny. 2-ia chast' posobiia po kursu stroitel'nykh mashin. Kuibyshev, Kuibyshevskii inzhenerno-stroite. in-t, 1962. 416 p. (MIRA 17:2)

ABAYEV, M.I.; KORNFEL'D, M.I.

Measuring the internal friction in solids. Prib. i tekh. eksp. 9 no.2:150-152 Mr-Ap'64. (MIRA 17:5)

1. Institut poluprovodnikov AN SSSR.

ABAYEV, M.I.

Device for measuring the normal mode and damping constants of oscillatory systems. Prib. i tekh. eksp. 9 no.2:153-155 Mr-Ap'64. (MIRA 17:5)

1. Institut poluprovodnikov AN SSSR.

ACCESSION NR: AP4033137 S/0120/64/000/002/0150/0152

AUTHOR: Abayev, M. I.; Kornfel'd, M. I.

TITLE: Measuring internal friction in solid-state bodies

SOURCE: Pribory* i tekhnika eksperimenta, no. 2, 1964, 150-152

TOPIC TAGS: friction, solid body internal friction, internal friction measurement, internal friction electrostatic measurement

ABSTRACT: A new electrostatic method for measuring internal friction is free from two shortcomings of the techniques used heretofore: cementing the specimen to the vibrator and electric contact with the specimen. The 16x5x1-mm specimen rests on two 0.07-mm glass filaments whose ends are welded to a glass disk (see Enclosure 1). Four Pt electrodes are cathode-sprayed on the disk surface. Two inner electrodes are intended for generating cantilever vibrations in the specimen by an electrostatic field; two outer electrodes, for measuring the

Card 1/3

ACCESSION NR: AP4033137

vibration amplitude by a variation of capacitance between these electrodes and the specimen. The device permits measuring the internal friction (from 10^{-6} and higher) in the kc range, within 100-600K, by attenuation of the specimen's free vibrations. "The authors wish to thank V. V. Sokolov who built the mechanical part of the device." Orig. art. has: 5 figures and 1 formula.

ASSOCIATION: Institut poluprovodnikov AN SSSR (Institute of Semiconductors, AN SSSR)

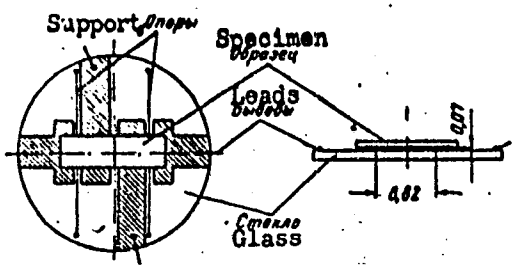
SUBMITTED: 09Apr63 DATE ACQ: 11May64 ENCL: 01

SUB CODE: SS NO REF SOV: 001 OTHER: 004

Card 2/3

ACCESSION NR: AP4033137

ENCLOSURE: 01



Device for measuring internal friction in solid-state materials

Card 3/3

ACCESSION NR: AP4033138 S/0120/64/000/002/0153/0155

AUTHOR: Abayev, M. I.

TITLE: Instrument for measuring the natural frequency and attenuation ratio of oscillatory systems

SOURCE: Pribory* i tekhnika eksperimenta, no. 2, 1964, 153-155

TOPIC TAGS: natural frequency, frequency measurement, attenuation measurement, mechanical system frequency measurement, mechanical system attenuation measurement

ABSTRACT: A new digital electronic instrument is briefly described which is intended for precision measurement of the frequency and attenuation of quartz standards, tuning forks, and other mechanical systems. The measuring range is 10-30 kc with errors of ±0.005% and ±3%, respectively. The frequency is determined by counting the number of cycles over a standard time interval. The

Card 1/2

ACCESSION NR: AP4033138

attenuation is determined by the number of cycles corresponding to a decrease in the amplitude from one set value to another. Vibrations in the test specimen are set up electrostatically; a capacitive sensor is used to detect them. The instrument is used as part of an outfit for measuring internal friction in solid-state bodies. Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Institut poluprovodnikov AN SSSR (Institute of Semiconductors, AN SSSR)

SUBMITTED: 09Apr63 DATE ACQ: 11May64 ENCL: 00

SUB CODE: EC NO REF SOV: 001 OTHER: 002

Card 2/2

L 8850-66 EWT(l)/EWT(m)/EPF(n)-2/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/GG

ACC NR: AP5022728 SOURCE CODE: UR/0181/65/007/009/2809/2815

44,55 44,55 57

AUTHOR: Abayev, M. I.; Kornfel'd, M. I. 18

44,55

ORG: Institute of Semiconductors AN SSSR, Leningrad (Institute poluprovodnikov AN SSSR)

TITLE: Pore formation during decomposition of solid solutions of bivalent ions in sodium chloride

SOURCE: Fizika tverdogo tela, v. 7, no. 9, 1965, 2809-2815

TOPIC TAGS: sodium chloride, light scattering, solid solution, crystal impurity, crystal structure, crystal defect

21,44,55

ABSTRACT: The process of pore formation during decomposition of solid solutions of Me^{2+} ions in NaCl is studied. Single crystal specimens with the following impurities were used: $BaCl_2$, $SrCl_2$, $CaCl_2$, $CoCl_2$, $NiCl_2$, $MnCl_2$, $CdCl_2$, $ZnCl_2$ and $PbCl_2$. A photomicrograph is given of a crystal with an admixture of $BaCl_2$. "Rods" lying along the <110> axis are clearly visible, although some of them are at a slight angle to this axis. These "rods" reach a length of 10-15 μ with thicknesses up to 1 μ. Quenching from 700°C completely eliminates these "rods" which indicates that they appear during decomposition of the solid solution. It is assumed that these objects are pores. While there were no visible pores in the other crystals studied, light scat-

Card 1/2

2

L 8850-66

ACC NR: AP5022728

tering experiments indicate that this is because their dimensions lie below the resolving power of the microscope. These light scattering experiments are described together with a brief explanation of the equipment used. The specimens were cylinders 10 mm in diameter and 15 mm long with polished ends. Scattering patterns are shown for some of the specimens with the light incident at various angles. Scattering patterns for the NaCl-$SrCl_2$ specimen are given as a function of annealing time at 340°C. A curve is given for intensity of scattered light as a function of temperature in the specimen containing strontium chloride. It is shown that pores are responsible for the scattering patterns. Subsequent experiments showed that large pores are formed by protracted annealing near the temperature corresponding to maximum scattering. Analysis of the experimental data shows that crystals with admixtures of $BaCl_2$, $CaCl_2$, $SrCl_2$, $CoCl_2$ and $NiCl_2$ form pores along axes <110>, while those with $CdCl_2$ and $MnCl_2$ form pores along axes <100>. The pores formed by decomposition of solid solutions of lead and zinc ions are small and their shape is uncertain (the scattering pattern is a circle). Sharp spikes on the patterns indicate that the pores are considerably longer than a wavelength of light, however they must be considerably smaller in diameter than a wavelength of light since they are invisible under the optical microscope except for the case noted above. Orig. art. has: 10 figures, 1 table.

SUB CODE: 20/ SUBM DATE: 23Apr65/ ORIG REF: 001/ OTH REF: 004

KVK

Card 2/2

ABAYEV, Novbat Abayevich; SHNEYER, M.S., red.; IVONT'YEVA, G.A., tekhn. red.

[Development of cotton growing in Soviet Turkmenistan] Razvitie khlopkovodstva sovetskogo Turkmenistana. Ashkhabad, Izd-vo AN Turkm. SSR, 1963. 167 p. (MIRA 16:11)
(Turkmenistan--Cotton growing)

SHUMAKOV, V.F., inzhener; PRASOV, M.M., inzhener; ABAYEV, V.M., inzhener po trudu; VOL'PITER, E.V., inzhener-teplotekhnik; MALAKHOVSKIY, L.A.; MIKHNO, B.P.

Mechanizing slag removal from slag pockets in open-hearth furnaces. Metallurg no.9:14-19 S '56. (MLRA 9:10)

1.Starshiy inzhener teknicheskogo otdela Metallurgicheskogo zavoda imeni Voroshilova (for Malakhovskiy). 2.Starshiy konstruktor proyektnogo otdela Metallurgicheskogo zavoda imeni Voroshilova (for Mikhno).
(Metallurgical plants--Equipment and supplies)

18.3200, [illegible]

77424
SOV/[illegible]

AUTHOR: Abayev, V. M. (Chief of the Bureau of Rate Setting of Open-Hearth Shop Nr 2)

TITLE: Potential Increase of Labor Productivity in Open-Hearth Shop

PERIODICAL: Metallurg, 1960, Nr 1, pp 23-24 (USSR)

ABSTRACT: Since 1950, steel output at Magnitogorsk Metallurgical Combine (Magnitogorskiy metalurgicheskiy kombinat) per worker increased by 54%. The progress was achieved as a result of: (1) converting open-hearth furnace to magnesium chromide roofs; (2) change of furnace parameters; (3) increaseing charge and ladle size; (4) better work management at stockyard and pouring bay; (5) changing to mazut firing (petroleum residue used as fuel oil); (6) using high-alumina brick for checkers; (7) increasing regenerator size; (8) mechanization of deoxidizer supply; (9) mechanization of closing tap hole; (10) pouring from large ladle with two stoppers; (11) improvement in

Card 1/2

charging machine; (12) using equipment for uniform distribution of steel in the ladles; (13) increasing ingot mold volume from 1.3 to 1.75 m^3. By the suggestion of foreman I. N. Kutnyy and senior foreman N. F. Ogo-likhin, a slag pocket sprayer was installed in the pouring bay eliminating four workers. Senior gas fitter A. I. Kurochkin and electrician A. F. Pisarev suggested that the service area for electricians and gas workers be extended, reducing the number of workers by eight. These improvements resulted in the increase of labor productivity and the decrease of working hours from 8 to 7 per day. Steel output increase at Magnitogorsk Metallurgical Combine is illustrated in the table below.

Steel output per worker

Year	[illegible]	1954	1955	1956	1957	1958
Ton	[illegible]	255.4	277.4	295.5	302.4	30[illegible]

ASSOCIATION: Magnitogorsk Metallurgical Combine (Magnitogorskiy metalurgicheskiy kombinat)

Card [illegible]

ABAYEV, Yu.I.; BOGUCHARSKOV, V.T.

Conditions for the survival of young roaches (Rutilus rutilus heckeli) in the Beysug Liman and methods of improving the efficiency on the Beysug Fish Spawning and Rearing Farm. Trudy AzNIIRKH no.6:119-125 '63. (MIRA 17:8)

ABAYEV, Yu.I.; KRYLOVA, A.G.

Feeding habits of young roach (Rutilus rutilus heckeli) in the Beysug spawning ground and liman. Trudy AzNIIRKH no.6:127-131 '63. (MIRA 17:8)

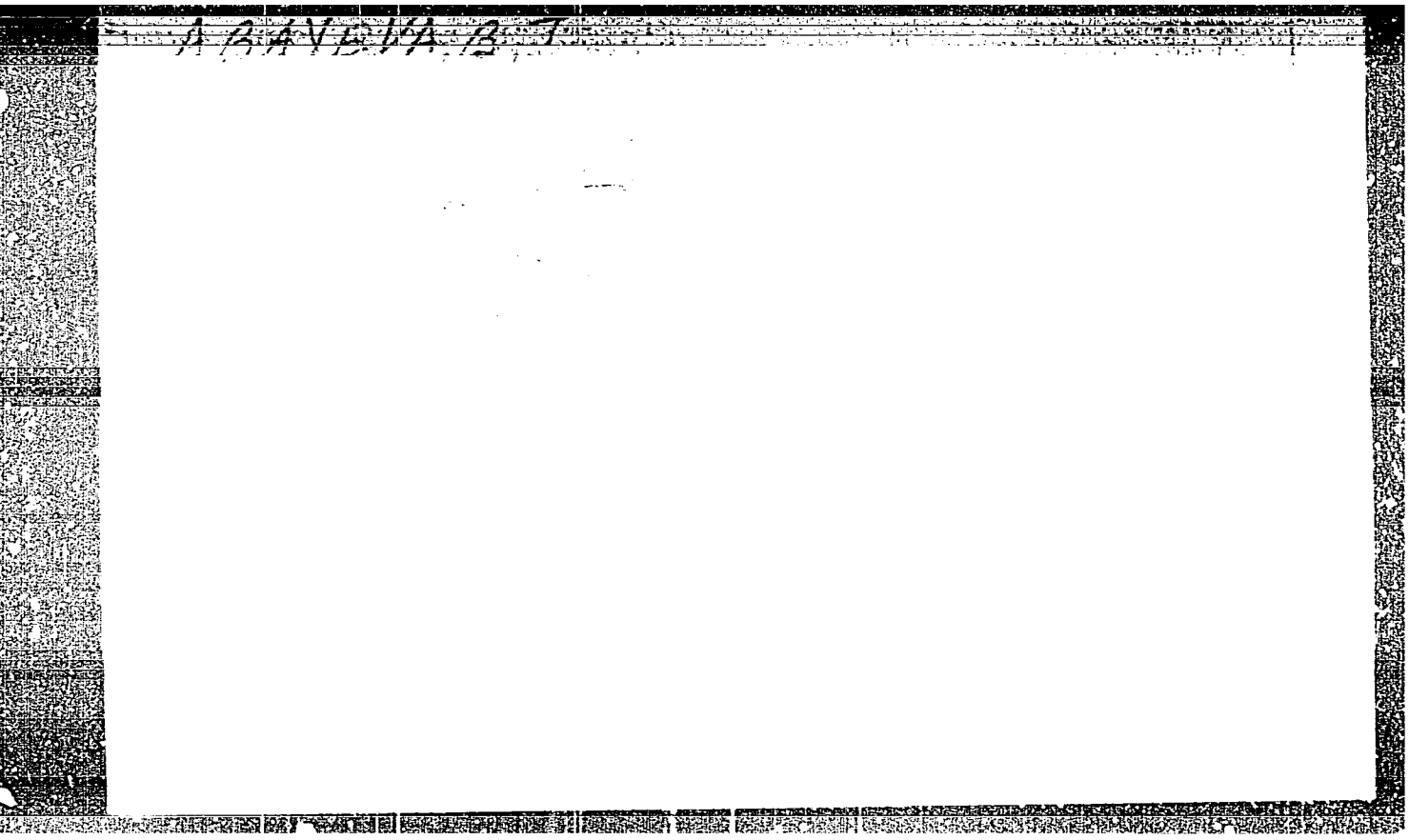
Abayeva, B. T. Cand Chem Sci

Dissertation: "Catalytic Cracking of n-Heptane and Methyl Cyclohexane."

17 June 49

Central Sci Res Inst of Aviation Fuels and Oils.

SO Vecheryaya Moskva
Sum 71



Cracking of high molecular hydrocarbons from the Romashkinsk crude oil using a natural alumino-silicate catalyst. (Cont.)

are given in Tables 4 and 5. Structural characteristics of individual groups of hydrocarbons (in %) - components of asphalt free starting material and its cracking products are given in Table 6. The composition(in wt %) of both starting materials and their cracking products is given in Table 7. 7 tables and 12 references, 7 of which are Russian.

Card 2/2

The Cracking of Individual Groups of Hydrocarbons of Romashkinsk Goudron in the Presssence of Natural Aluminosilicate Catalysts.

with an activity index equal to 18.5 at a temperature of 450°C in a mixture with n-pentane (ratio 3:1). Table 2 gives the chemical composition of the deasphalted goudron and its fractions and Table 3 the chemical composition of the cracked petrol; tables 4 and 5 the properties of the fractions obtained after the cracking of individual components of the deasphalted goudron at 200 - 350°C and 350 - 450°C respectively. The properties of the cracking residue boiling above 450°C are shown in Table 6. The highest degree of decomposition under catalytic cracking conditions was observed in the heavy paraffin-naphthenic hydrocarbons which had a complex structure. The degree of adsorption of these paraffins on the surface of a catalyst is high, and they do not poison the catalyst which can be further used for the kerosene gas oil fractions. There is also a high degree of decomposition of the light aromatic hydrocarbons, but the surface of the catalyst is poisoned by the hydrocarbons used as starting material, and also by the kerosene gas oil fractions, which leads to a decreased formation of cracked petrol and of the gas. The light aromatic hydrocarbons undergo the highest degree of conversion. The main characteristic of the

65-2-8/12

The Cracking of Individual Groups of Hydrocarbons of Romashkinsk Goudron in the Presence of Natural Aluminosilicate Catalysts.

decomposition of high-molecular compounds are the splitting off of the side chains, the rupture of the aliphatic chains, the rupture of the sulphur - and possibly other links, which is followed by a decomposition of the formed middle fractions. The dehydrogenation of the naphthenic ring is clearly shown, but is of no great importance. As a result of this reaction, middle and heavy aromatic hydrocarbons are formed which possibly partly undergo condensation reaction with a formation of ashphaltenes and coke. During the cracking of the paraffinic and light aromatic hydrocarbons the hydrogen atom is transferred. When highly aromatic or tar raw material is used the surface of the catalyst is blocked, and a very weak reaction is observed. Results of investigations show clearly that it is advantageous to use selective catalytic processes for the treatment of high molecular crude petroleum raw material. The processing of the residual fractions on natural catalysts should give high yields of kerosene gas oil fractions. There are 7 Tables and 1 Russian Reference.

Card 3/3

ASSOCIATION:VNII NP.

AVAILABLE: Library of Congress.

SOV/81-59-15-54832

Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 15, p 423 (USSR)

AUTHORS: Agafonov, A.V., Abayeva, B.T., Okinshevich, N.A.

TITLE: The Catalytic Cracking of High-Molecular Petroleum Raw Material on Natural Catalysts as a Possible Source of Raw Material for the Production of Oils

PERIODICAL: Tr. Vses. n.-i. in-ta po pererabotke nefti i gaza i polucheniyu iskusstv. zhidk. topliva, 1958, Nr 7, pp 181 - 202

ABSTRACT: The results of research work on the problem of rational processing of the high-molecular part of petroleum to engine fuel and lubrication oils are laid down. Ample material on the analysis and the material balance of products of cracking of petroleum, mazut and asphalt petroleum on natural Al-Si catalysts is presented. The experiments were conducted at 450°C, the volume rate of the raw material of 1.0 per hour, a frequency of the circulation of the catalyst 5:1. The fractions boiling at up to 200, 200 - 350, 350 - 450°C and the residue were subjected to detailed analysis. It has been established that under these conditions the asphaltenes and resinous substances as well as medium and light aromatic

Card 1/2

SOV/81-59-15-54832

The Catalytic Cracking of High-Moleoular Petroleum Raw Material on Natural Catalysts as a Possible Source of Raw Material for the Production of Oils

compounds, naphthene and paraffin compounds are transformed by 85 - 90%. The principal direction of the decomposition is the rupture of the side chains, the decomposition of the isoparaffin and paraffin hydrocarbons, the rupture of the naphthene rings and the dehydrogenation of bi- and polycyclic hydroaromatic hydrocarbons. The fractions 350 - 450°C contain up to 35% naphthene, isoparaffin and light aromatic hydrocarbons suitable for the production of commercial oils. The process is strongly affected by the presence of low-boiling components in the initial raw material. In the cracking of petroleum the components boiling > 450°C are transformed in the most intensive manner; the fractions boiling < 350°C are little affected.

S. Rozenfel'd

Card 2/2

SOV/68-58-11-14/25

AUTHORS: Vorozhtsov N.N., Corresponding Member of the Academy of Science of the USSR, Doctor of Chemical Science, Lisitsyn V.N., Candidate of Chemical Science, Agafonov A.V. and Krasivichev V.V., Candidates of Technical Science, and Abayeva B.T., Candidate of Chemical Science

TITLE: Transformation of Higher Homologues of Phenol into Lower Ones (Prevrashcheniye vysshikh gomologov fenola v nizshiye)

PERIODICAL: Koks i Khimiya, 1958, Nr 11, pp 42-47 (USSR)

ABSTRACT: The results of an investigation on the dealkylation of technical xylenol with simultaneous alkylation of benzole in a pilot plant of the All-Union Scientific Research Institute of the Petroleum Industry in which bead aluminosilicate was used are described. This was a continuation of the previously published work (Ref 1) on the transformation of xylenols (on interaction with benzole) into phenols and cresols on cracking under mild conditions on an aluminosilicate catalyst. The experimental plant used (Fig 1) is outlined. It was established that, on passing xylenol in mixture with benzole

Card 1/3

Transformation of Higher Homologues of Phenol into Lower Ones

(1 : 3.65 by weight) over aluminosilicate catalyst at temperatures in the range 300-400°C and volume velocities of 0.42-1.47hr^{-1}, up to 60% (on weight of starting xylenol) of phenolic compounds (phenol, o-, m- and p-cresols, xylenols), including 20-22% of phenolic-cresolic fraction, are obtained. Simultaneously 11-19% of benzene homologues with a boiling temperature of 100-185°C and 13-18% of neutral compounds with boiling temperatures above 185°C are formed. 8-25% of coke is deposited on the catalyst. The influence of the temperature of the reaction, the volume velocity of reactants (Table 1), additions of water vapour and various proportions of benzole (Table 2) on the transformation of xylenol and changes in the activity of the catalyst with time of operation (Table 3) were established. It was found that at temperatures 300-320°C and volume velocities 0.92-1.47hr^{-1} more phenolic-cresolic fraction and less of neutral compounds and coke on the catalyst is obtained (taking into consideration the transformation of xylenol). At 300°C and a volume velocity 0.92hr^{-1} 330kg of

Transformation of Higher Homologues of Phenol into Lower Ones

phenolic-cresolic fraction and about 200kg of benzene homologues with a boiling temperature 100-185°C can be obtained from 1 ton of xylenol.
There are 3 tables, 3 figures and 6 references (4 Soviet, 1 English and 1 German)

ASSOCIATION: MKhTI im. D.I. Mendeleyeva, VNII NP

Card 3/3

SOV/65-59-4-4/14

AUTHORS: Agafonov, A.V., Abayeva, B.T., Andreyeva, A.S., Eygenson, A.S., Kantor, I.I. and Ivchenko, Ye.G.

TITLE: Catalytic Cracking of Crude and Hydro-Purified Vacuum Gas-Oil from Arlan Petroleum (Kataliticheskiy kreking iskhodnogo i gidroochishchennogo vakuumnogo gazoylya arlanskoy nefti)

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1959, Nr 4, pp 18-24 (USSR)

ABSTRACT: Vacuum gas-oil from Arlan petroleum contains 3.2% sulphur compounds, 0.11% nitrogen compounds and 24% tarry substances; these quantities are larger than the corresponding quantities in heavy gas-oil from Tatariya and Bashkiriya petroleums. These components block the active surface of the catalyst during cracking, prevent the access of hydro-carbon molecules and therefore decrease the degree of conversion of the crude material. Considerable amounts of coke are deposited on the catalyst which inhibits secondary reactions and leads to decreased yields and inferior quality end-products. Hydro-purification was carried out on a continuous apparatus in the VNII NP by

Card 1/5

Catalytic Cracking of Crude and Hydro-Purified Vacuum Gas-Oil from Arlan Petroleum

N.A.Chepurov and R.N.Yudinson; a stationary aluminium-cobalt-molybdenum catalyst was used at 380°C, a pressure of 50 atm and space velocity of the supplied crude material of 0.7 hour^{-1}. The properties of the starting material and of the hydro-purified vacuum gas-oil are tabulated (table 1). The octane number of the end product was appreciably higher than when using fractional distillation (58.5 as compared to 41.0) and contained considerably less sulphur (0.013 as against 0.17%). The properties of the gas-oil fractions are listed in table 2. Cracking experiments of both the crude and hydro-purified vacuum gas-oil were carried out on a pilot plant with a synthetic bead catalyst at temperatures within the limits of 430 to 520°C, atmospheric pressure and a space velocity of 0.65 to 1.5, calculated on the volume of the catalyst per hour. The ratio of the catalyst to the crude material was constant in all experiments and equalled 5:1 (table 3). Optimum

Catalytic Cracking of Crude and Hydro-Purified Vacuum Gas-Oil from Arlan Petroleum

yields of petrol were obtained at temperatures between 450 and 475°C when the optimum space velocity of the supplied raw material was within the limits of 1.0 to 0.65 hours^{-1}. The hydro-purified vacuum gas-oil could more easily be processed; an optimum yield of light components at the same space velocities was achieved at 50°C. The authors concluded that the presence of a considerable quantity of light fractions boiling up to 350°C (37.6 as against 19.4%) influences the yield of the light components. The optimum yield at this temperature reached 66 to 67% by weight as against 58 to 59%. Results of the cracking experiments indicate (Fig 1) that the hydro-purification of the crude (by separating the tarry substances, metals, sulphur and nitrogen) improves the process conditions and also the yields and properties of the cracking products (compare table 4). The gasoline obtained by this process is less unsaturated, contains more aromatic compounds and has higher octane numbers (80 to 81.5 as compared to

Catalytic Cracking of Crude and Hydro-Purified Vacuum Gas-Oil from Arlan Petroleum

77.7 to 80.7) (Fig 2). A lower content of unsaturated compounds renders the gasoline more stable. Its induction period exceeds 600 minutes. The light catalytic gas-oils, obtained during the cracking of hydro-purified crudes, show improved properties. Their cetane number is 34 to 38 (as against 30 to 33) and they contain 0.21 to 0.38% sulphur (as against 2.6 to 3.3%) (Fig 3). These light gas-oils can be used directly as components of diesel fuels. The heavy catalytic gas-oils (fractions boiling above 350°C) can be used for the production of lubricating oils or re-used as recycles. In both cases 2 to 3% of the tarry (tail) fractions have to be separated. The gaseous hydrocarbons produced by this process are of interest as starting materials for petro-chemical syntheses. The influence of the temperature on the ratio of unsaturated and saturated hydrocarbons in gaseous reaction products, and on the

Catalytic Cracking of Crude and Hydro-Purified Vacuum Gas-Oil from Arlan. Petroleum

content of unsaturated hydrocarbons in the gas, is shown in a graph (Fig 4). There are 4 figures, 4 tables and 2 English references.

SOV/65-59-4-7/14

AUTHORS: Agafonov, A.V., Soskind, D.M. and Abayeva, B.T.

TITLE: The Operation and Methods of Reconstruction of Catalytic Cracking Plants Where Bead Catalysts are Used (Opyt ekspluatatsii i puti rekonstruktsii ustanovok kataliticheskogo krekinga s sharikovym katalizatorom)

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1959, Nr 4, pp 34-44 (USSR)

ABSTRACT: Investigations were carried out in the VNII NP which made it possible to work out conditions and make recommendations for the manufacture of high quality petrols. Heavy distillates, boiling at temperatures between 300 and 500°C, can be used. The process is carried out in one stage and, therefore, the efficiency of the plant increased by 30 to 35%. The properties of the gas-oil fractions of Romashkaya petroleum are given in table 1. It can be seen that the heavy crudes differ from the kerosine-gas-oil fractions by their high boiling and solidification points, by their high content of tar, sulphur and aromatic compounds as well as by appreciable content of polycyclic aromatic compounds,

The Operation and Methods of Reconstruction of Catalytic Cracking Plants Where Bead Catalysts are Used

asphaltenes and metal salts. Various investigations carried out in the Novoufimka plant during 1954 to 1955, and modifications of the plant carried out at the time, are discussed in detail. The reconstructions, carried out at present, aim to increase the efficiency of the plant 1.5-fold (first modification) and 1.7-fold (second modification) without altering the principal layout of the plant. A further reconstruction is to achieve a considerable improvement in the conversion process which will increase the efficiency of the plant by 100% (third modification). The first modification is based on recommendations made by the authors, the Novoufimka factory Giproneftemash and Giproneftezavod. This type of reconstruction was carried out on one plant of the NUNPZ and three plants of the Salavatskiy factory. The various modifications are listed in a table on page 40 and the most important of these discussed in detail. Table 2 shows the improvements achieved during 1956 to 1957 and the first nine months of 1958 in various plants where the recommended

The Operation and Methods of Reconstruction of Catalytic Cracking Plants Where Bead Catalysts are Used

reconstructions have been carried out. The second modification was recommended by GrozNII and Giproneftezavod and the third by VNII NP and Giproneftemash. The lay-out of the last plant is given in Fig 3 and the authors suggest that this last modification should only be incorporated in newly-erected plants. There are, however, various drawbacks e.g. the circulation time of the catalyst is rather low, the generator is not completely efficient, the cooling pipes of the regenerator are unsatisfactory and this leads to an increased catalyst consumption. There are 3 figures and 2 tables.

ABAYEVA, D. T.

PHASE I BOOK EXPLOITATION SOV/4659

Osnovy tekhnologii neftekhimicheskogo sinteza (Fundamentals of Synthesis Technology in Petroleum Chemistry) Moscow, Gostoptekhizdat, 1960. 852 p. 3,800 copies printed.

Eds.: Dintses, Arkadiy Il'ich, Professor, and Lev Aleksandrovich Potolovskiy, Professor; Executive Ed.: L.A. L'vova; Tech. Ed.: E.A. Mukhina.

PURPOSE: This book is intended for engineers and chemists of petroleum refineries and chemical plants, for councils of the national economy, planning organizations and scientific research institutes engaged in chemical processing and large-scale utilization of petroleum stock for the production of synthetic products.

COVERAGE: The book describes important commercial methods of producing hydrocarbon petroleum and gas stock and coal stock for the manufacture of alcohols, aldehydes, ketones, acids, detergents, synthetic fibers, and synthetic rubber. Flow sheets are included, and the basic equipment of the petrochemical industry is described. The physicochemical properties and use of intermediate and end synthetic products are also described. The state of the petrochemical industry outside the USSR and prospects for its development are covered. No personalities are mentioned. References follow each chapter.

Card 1/21

TABLE OF CONTENTS:

AGAFONOV, A.V.; ABAYEVA, B.T.; OKINSHEVICH, N.A.

Distribution of sulfur in the cracking products of heavy charge stocks. Khim.sera-i azotorg.soed.sod.v neft.i nefteprod. 3:183-192 '60. (MIRA 14:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.
(Petroleum products) (Sulfur organic compounds)

S/065/63/000/001/004/005
E075/E436

AUTHORS: Morozov, V.I., Agafonov, A.V., Abayeva, B.T., Ryabov, V.A., Karpenko, L.P., Gilyazetdinov, L.P.

TITLE: The preparation of feedstock carbon black in thermal cracking units

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.1, 1963, 39-42

TEXT: A threefold increase in the production of carbon black is scheduled in the current 7-year plan. New feedstocks suitable for conversion into carbon black are therefore required to supplement green and anthracene oils used at present. Catalytic gas oils and lubricating oil extracts (phenol extracts) were subjected to thermal cracking to produce oils suitable for the production of carbon black. The cracked oils (43.5, 36.0 and 54.4% yields of the feedstock for light gas oil, heavy gas oil and phenol extract respectively) contained from 70 to 80% of aromatic hydrocarbons, of which at least 50% were heavy aromatics. The cost of these oils was about half that of green oil and a quarter of anthracene oil. The yields of carbon black from the oils ranged from 47 to

Card 1/2

MOROZOV, V.I.; AGAFONOV, A.V.; ABAYEVA, B.T.; KARPENKO, L.F.

Results of the industrial adoption of the production of crude for carbon black in thermal cracking devices. Neftepererab. i neftekhim. no.4:18-21 '63 (MIRA 17:7)

1. Omskiy neftepererabatyvayushchiy zavod i Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gazu i polucheniyu iskusstvennogo shidkogo topliva.

GONSALES, A.A.; KURGANOV, V.M.; AGAFONOV, A.V.; ABAYEVA, B.T.; POLETAYEV, V.B.; VIV'YER, A.S.; RUDOVICH, M.A.; BELYAYEVA, Z.G.; RUTMAN, G.I.

Results of redesigning an industrial catalytic-cracking device. Nefteper. i neftekhim. no.9:6-10 '63. (MIRA 17:8)

1. Salavatskiy kombinat i Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti.

AGAFONOV, A.V.; ABAYEVA, B.T.; OKINZHEVICH, N.A.

Catalytic cracking products for petrochemical syntheses.
Trudy VNII NP no. 9:27-51 '63. (MIRA 17:6)

ABAYEVA, B.T.; AGAFONOV, A.V.; GILYAZETDINOV, L.P.; GYUL'MISARYAN, T.G.; ZUYEV, V.P.; MOROZOV, V.I.

Testing thermocatalytic gas oil in the production of furnace black. Nefteper. i neftekhim. no.12:17-19 '63. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

56.7%, which compares well with the yields from green oils. The carbon blacks satisfy the ГОСТ 7885-56 (GOST 7885-56) specification. There are 1 figure and 4 tables.

ASSOCIATION: Omskiy Neftepererabatyvayushchiy zavod VNII NP
(Omsk Refinery VNII NP)

Card 2/2

AGAFONOV, A.V.; ABAYEVA, B.T.; OKINSHEVICH, N.A.; ANDREYEVA, A.S.; MOROZOV, V.I.

Developing extraction methods for obtaining carbon black stock from catalytically cracked gas oils. Khim. i tekh. topl. i masel 9 no.5:13-16 5 My'64 (MIRA 17:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.

ABAYEVA, B.T.; OKINSHEVICH, N.A.; AGAFONOV, A.V.; SIDLYARENOK, F.S.; KAZANSKIY, V.L.; GYUL'MISAR'HAN, T.G.; SUYETENKO, L.P.; GILYAZETDINOV, L.P.

Using extracts as stock for the production of active and semi-active carbon black. Nefteper. i neftekhim. no.5:30-33 '64. (MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva, Kuybyshevskiy nauchno-issledovatel'skiy institut neftyanoy promyshlennosti i Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.

AGAFONOV, A.V.; [illegible]; [illegible]; [illegible]; [illegible]; [illegible]; [illegible]; [illegible]; [illegible]

Obtaining raw stock for the production of active carbon black by extraction with the selective solvents of the gas oils of catalytic cracking. Khim. i tekh. topl. i masel 9 no.7:36-39 Jl '64.

(MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniya iskusstvennogo zhidkogo topliva.

L 12807-66 EWT(m)/EWP(j)/EWP(t)/EWP(b) IJP(c) JD/RM

ACC NR: AP5028680 SOURCE CODE: UR/0318/65/000/011/0025/0028

AUTHOR: Gyul'misaryan, T. G.; Gilyazetdinov, L. P.; Aksenova, E. I.; Shmeleva, R. I.; Khokhlov, B. P.; Bystrov, K. M.; Sokolova, V. V.; Sinyakina, A. V.; Abayeva, B. T.; Okinshevich, N. A.

ORG: NIIShP; VNIINP: Novo-Yaroslavl Carbon Black Plant (Novo-Yaroslavskiy sazhevyy zavod); Volgograd Carbon Black Plant (Volgogradskiy sazhevyy zavod); Scientific Research Technological Design Institute (Nauchno-issledovatel'skiy konstruktorno-tekhnologicheskiy institut)

TITLE: Industrial tests of new types of petroleum stock in the production of activated PM-70 furnace black

SOURCE: Neftepererabotka i neftekhimiya, no. 11, 1965, 25-28

TOPIC TAGS: activated carbon, petroleum product, gas oil fraction, phenol

ABSTRACT: In order to confirm and develop the results of earlier studies which indicated that catalytic and thermal gas oil could be used in the production of activated furnace black, experimental batches of initial sulfur and hydrofined phenol extracts of catalytic and thermal gas oil were produced. The physicochemical characteristics of the new types of petroleum stock are compared with those of green oil; in the degree of aromatization they are identical, but in fractional composition, molecular weight, and viscosity, green oil is slightly lighter. Industrial tests confirmed that hydrofined phenol extracts of catalytic gas oil, the

Card 1/2 UDC: 66.095.21:547.21.001.5

L 12807-66

ACC NR: AP5028680

initial sulfur-containing phenol extract of catalytic gas oil, and also mixtures of thermal gas oil and green oil (in the ratio of 60:40) can be used in the production of activated PM-70 furnace black in plants equipped with cyclone reactors, a dry system being used for trapping the black. Orig. art. has: 2 figures and 3 tables.

SUB CODE: 07 / SUBM DATE: none / ORIG REF: 006

jw

Card 2/2

SOV/137-58-12-25541

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 12, p 205 (USSR)

AUTHOR: Abayeva, M. M.

TITLE: Functional Condition of the Liver Among Lead-shop Workers at the "Elektrotsink" Plant (Funktsional'noye sostoyanive pecheni u rabochikh svintsovogo tsekha zavoda "Elektrotsink")

PERIODICAL: [Tr.] Sev-Osetinsk., med. in-ta, 1958, Vol 7, Nr 1, pp 119-124

ABSTRACT: As a result of the study of initial insidious stages of Pb attack on the liver among 100 practically healthy workers with over 5 years of service, the following conclusions were drawn: 1) 60% of lead-shop workers with over 5 years' service, who are considered to be practically healthy, displayed some symptoms of chronic lead poisoning; 2) 77% of workers who are in contact with Pb for long periods of time exhibit symptoms of chronic functional insufficiency of the liver; 3) Regular observation of the functional condition of the liver among lead-shop workers is necessary.

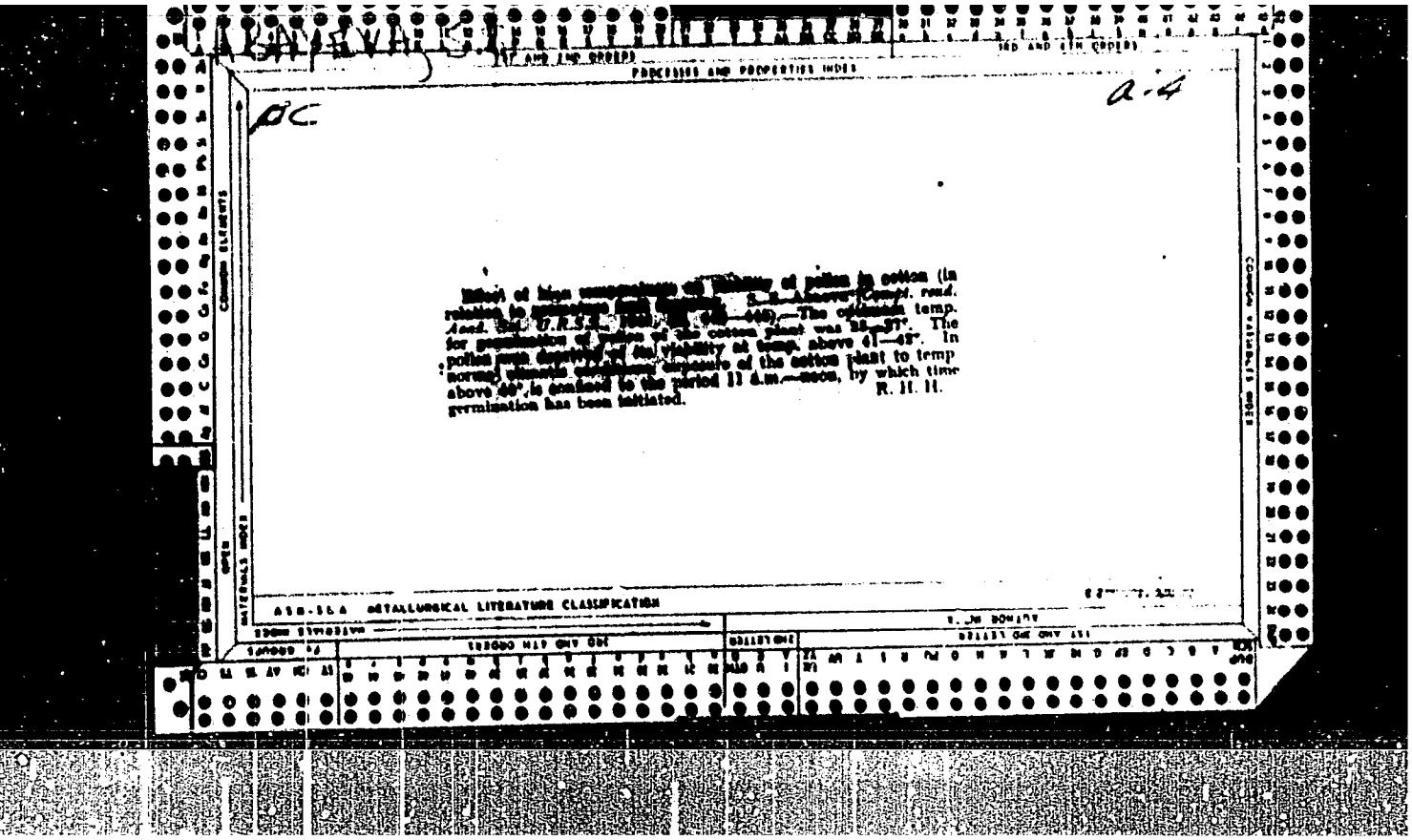
Yu. S.

Card 1/1

BOTVINIK, M.M.; ABAYEVA, S.M.; KOKSHAROVA, L.M.; OLADKINA, V.A.

Synthesis of O-dipeptidyl derivatives of acylserine and glycolic acid. Zhur. ob. khim. 30 no.12:3877-3883 D '60. (MIRA 13:12)

1. Moskovskiy gosudarstvennyy universitet.
(Serine) (Glycolic acid)



Abs Jour : Ref Zhur - Biol., No 7, 1958, 29879

the cotton wool output by 15-23%. Soaking the seeds for 12 hours in a 0.005% solution of $CuSO_4$ boosted their germination. The highest cotton wool yield occurred with 12 hour seed soaking and the further spraying of the plants in a solution of H_3BO_3.

Country : USSR M
Category: Cultivated Plants. Commercial. Oil-Bearing. Sugar-Bearing.

Abs Jour: RZhBiol., No 22, 1958, No 100367

period from the 3 of June to the 23 of July changed from 0.5 to 0.75 milligrams/kg, in the horizon of 30-40 centimeters from 0.05 to 0.4, in the horizon of 50-60 centimeters from 0.17 to 0.4 and in the horizon of 70-80 centimeters - from 0.17 to 1.5 milligrams/kg of the soil. It is pointed out that the content of mobile B in the soil is quite sufficient for the normal development of the cotton plant. Determinations of B content in the plants showed that in different periods of the selection of test specimens, the B content in the

Card : 2/4

Country : USSR
Category: Cultivated Plants. Commercial. Oil-Bearing. Sugar-Bearing.

M

Abs Jour: RZhBiol., No 22, 1958, No 100367

62%, in the upper - by 130%, in the buds and flowers - by 42%. -- B. P. Pleshkov

Card : 4/4