PLUGIN, I.Ye.; ASSANOV, P.V.; KOMAROV, I.A.

Nonseparable thermostatic condensate eliminator. Prom.energ. 15 no.2:20 F '60. (MIRA 13:5)
(Steam)

KOMAROV, I.A.

Heat transfer accompanied by the condensation of vapor from a vapor-gas mixture. Izv. vys. ucheb. zav.; khim. i khim. tekh. 4 no. 2:303-309 '61. (MIRA 14:5)

1. Leningradskiy tekhnologicheskiy institut im. Lensoveta. Kafedra protsessov i apparatov.
(Gases) (Water vapor) (Heat—Transmission)

KOMAROV, I.A.

Effect of the enthalpy criterion on heat exchange in the condensation of vapor from a steam-gas mixture. Izv.vys. ucheb.zav.;khim.i khim.tekh. 5 no.3:496-501 '62. (MIRA 15:7)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta, kafedra protsessov i apparatov.

(Enthalpy)
(Heat--Transmission)
(Vapors)

KOMAROV, I.

Pear

Pear tree with its own roots. Sad i og. no. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, _____1953. Unclassified.

Komarov, I. A.

RUBAN, Ye.L.; KOMAROV, I.A.

Treatment of tree and shrub seeds with ultrasonic waves. Biul.Glav. bot. sada no.17:54-56 '54. (MLRA 8:3)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR.
(Ultrasonic waves--Physiological effect) (Germination)

KOMAROV, I. A.

"The Biological Basis for the Time of Grafting of Cultivated Varieties of Lilacs." Cand Biol Sci, Inst of Forestry, Acad Sci USSR, Moscow, 1955. (KL, No 15, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

KOMAROV, I.A.

Rooting of lilac cuttings in various substrata as related to meteorological conditions. Biul.Glav.bot.sada no.21:53-55 '55.
(MIRA 8:12)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR.
(Lilacs)

KOMAROV, I.A.

Period for rooting cuttings of the lilac and certain other shrubs.
Biul.Glav.bot sada no.22:30-38 '55. (MLRA 9:5)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR.
(Plant cuttings) (Shrubs)

KOMAROV, I.A.

Effect of certain factors on the rooting capacity of summer cuttings of cultivated lilac. Biul.Glav.bot.sada no.26:38-44 '56. (MLRA 10:2)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR.
(Lilacs) (Plant cuttings)

KOMAROV, I.A.; FEDOROVA, E.V.

Anatomical structure of the shoot as a rooting capacity indicator for lilac cuttings. Biul. Glav. bot. sada no.27:40-45 '57.
(MLRA 10:5)

1. Glavnyy botanicheskiy sad Akademii nauk SSSR.
(Lilacs) (Plant cuttings) (Botany--Anatomy)

26-58-7-32/48

AUTHOR: Komarov, I.A., Candidate of Biological Sciences

TITLE: Open-Ground Rhododendrons and Azaleas (Gruntovyye rododendrony i azalii)

PERIODICAL: Priroda, 1958, Nr 7, pp 111-113 (USSR)

ABSTRACT: The Main Botanical Garden of the AN USSR planted several rhododendron types in open ground in 1942, where they have stayed since then, grew, flowered profusely and bore ripe seeds. In winter, the plants are easily protected from cold winds by simple frames of wood and tar paper. There are also many suitable azalea types which yield excellent results when their cultivation is started in green houses. The Rh. Cunninghami, Cunningham's White, Rh. macrophyllum, Rh. kamtschaticum, Rh. Chamaecistus, Rh. catawbiense and Azalea pontica and Az. sinensis types are mentioned. In clayey soils, only Rhodorastrum species can be cultivated. Detailed cultivation instructions are given for rhododendrons, hints for azaleas.
There are 2 photos.

Card 1/2

Open-Ground Rhododendrons and Azaleas 26-58-7-32/48

ASSOCIATION: Glavnyy botanicheskiy sad AN SSSR - Moskva (The Main Botanical Garden of the AN USSR - Moscow)

1. Botany--USSR

Card 2/2

LAPIN, P.I.; KOMAROV, I.A.; LEONOV, A.G.; MAZURKEVICH, F.S.; MAKAROV, S.N.; MARTEM'YANOV, P.B.; MOSUNOVA, D.I. [deceased]; SAKHAROV, I.M.; SIDNEVA, S.V.; TSITSIN, N.V., akademik, otv.red.; MAKAROV, S.N., red.izd-va; GUSEVA, A.P., tekhn.red.

[Trees and shrubs; results obtained in the Main Botanical Garden of the Academy of Sciences of the U.S.S.R.] Derev'ia i kustarniki; kratkie itogi introduktsii v Glavnom botanicheskom sadu Akademii nauk SSSR. Moskva, Izd-vo Akad.nauk SSSR, 1959. 190 p. (MIRA 12:10)

1. Moscow. Glavnyy botanicheskiy sad.
(Trees) (Shrubs)

KOGAN, B.M. (Moskva, ul. Kachalova, d. 10, kv. 5); KOMAROV, I.A.

Electrocardiographic changes in pulmonary infarcts developing after mitral commissurotomy. Grudn. khir. 4 no.5:52-53 S-O'62 (MIRA 17:3)

1. Iz laboratorii funktsional'noy diagnostiki (zav. - kand. med. nauk G.G. Gel'shteyn) i otdeleniya priobretennykh zabolevaniy serdtsa (zav. - prof. S.A. Kolesnikov) Instituta grudnoy khirurgii AMN SSSR (dir. - prof. S.A. Kolesnikov, nauchnyy rukovoditel' - akademik A.N. Bakulev).

SHISHKIN, V.P., doktor med.nauk; KOMAROV, I.A., kand.med.nauk

Results of the treatment of varicose veins of the lower extremities by Teprover and Nesterov's new method. Trudy KGMI no.10:330-334 '63. (MIRA 18:1)

1. Iz kafedry obshchey khirurgii (zav. kafedroy - prof. V.P. Shishkin) Kalininskogo gosudarstvennogo meditsinskogo instituta.

KOMAROV, I.A., kand.med.nauk

Blood coagulability in obliterating endarteritis and atherosclerosis of the lower extremities. Trudy KGMI no.10:352-356 '63.
(MIRA 18:1)

1. Iz kafedry obshchey khirurgii (zav. kafedroy-professor V.P. Shishkin) Kalininskogo gosudarstvennogo meditsinskogo instituta.

KOMAROV, I.G.

Mechanized washing of fermentation tanks. Spirt. prom. 24 no.6:34-36 '58. (MIRA 11:10)
(Fermentation)

KOMAROV, I. K.

Chair of Microbiology, State Medical Inst., SVERDLOVSK, (-1944-)

"On the serological diagnosis of gas gangrene,"

Zhur. Mikrobiol., Epidemiol., i Immunobiol., No. 9, 1944.

KOMAROV, I.M., inzh.; BONDARENKO, N.I., inzh.; FOMITSKIY, I.V., mekhanik

TKZM-3,5 tractor-drawn mower for green crops. Mekh. sil'. hosp. 10 no.3:25-26 Mr '59. (MIRA 12:6)
(Mowing machines)

KOMAROV, I. M.

USSR/Engineering-Measuring instruments

Card : 1/1

Author : Komarov, I. M., Cand. in Tech. Sciences

Title : Effect of illumination of scales of universal measuring instruments on the speed and accuracy of calculations

Periodical : Vest. Mash. 34/5, 87 - 88, May 1954

Abstract : Experiments were made to determine the accuracy of reading sliding calipers and other instruments, under varying degrees of illumination. Graphs and tables were made of the calculations, based on these measurements, which demonstrated, that the accuracy improved, when the illumination was increased over that ordinarily used in workshops.

Institution : ....

Submitted : ....

Engineering—Machine-shop work

Card 1/1 : Pub. 128—9/33

Authors : Komarov, I. M., Cand. Tech. Sci.

Title : Heat phenomena during sharpening

Periodical : Vest. mash. 34/8, 35-36, Aug 1954

Abstract : The results of a study which was conducted to determine the effect of sharpening on the heat factor in a part being machined, are presented and a method of establishing a balance for this heat factor, is described. Three Russian references: (1915-1951). Drawing.

Institution : .....

Submitted : .....

KOMAROV, I.M., kandidat tekhnicheskikh nauk.

Using temperature indicators for investigating the heat penetration range in turnet workpieces. Vest.mash. 36 no.11:46-47 N '56.
(MLRA 10:1)

(Metal cutting) (Thermometry)

KOMAROV, I.P.

Mechanized conveying of raw materials to the production line.
Spirt. prom. 25 no.6:31-33 '59. (MIRA 12:12)
(Petrovskiy (Ivanovo Province)--Distilling industries--Equipment and supplies)

KOLOMENSKIY, N.V.; KOMAROV, I.S.; IVANOVA, I.N.

The influence of glauconite on the physical and industrial properties of rocks. Trudy MGRI no.28:113-130 '55.
(Glauconite) (MLRA 8:6)

KOMAROV, I.S.

Using statistical methods for studying rocks in engineering geology. Trudy MGRI 29:169-178 '56. (MLRA 10:4)
(Engineering geology) (Rocks--Testing)

SOV-132-58-9-14/18

AUTHORS: Shirokov, A.S.; Kupalov Yaropolk, I.K., and Komarov, I.S.

TITLE: The XXII Congress of the German Geophysical Society (XXII S"yezd Germanskogo geofizicheskogo obshchestva)

PERIODICAL: Razvedka i okhrana nedr, 1958, Nr 9, pp 52-54 (USSR)

ABSTRACT: The above mentioned conference took place in Leipzig in May 1958. The authors, who represented the USSR, give a report on the activities of the conference.

ASSOCIATIONS: 1) Ministerstvo geologii i okhrany nedr SSSR (Ministry of Geology and Conservation of Mineral Resources of the USSR)
2) Gosplan SSSR (Gosplan of the USSR)
3) VNII-geofizika (VNII - Geophysics).

1. Geophysics--Germany

Card 1/1

KOLOMENSKIY, N.V.; KOMAROV, I.S.; Prinimali uchastiye: IVANOVA, I.N.; DROZDOV, S.V.; ZAKHAROVA, N.A., red.

[Engineering geology] Inzhenernaia geologiia. IAroslavl', Vysshaia shkola, 1964. 480 p. (MIRA 17:6)

KOLOMENSKIY, N.V.; KOMAROV, I.S.

Lenin's ideas on the electrification of the country and problems of engineering geology related to hydrotechnical power contructions. Izv.vys.ucheb.zav.; geol. i razv. 3 no.5:3-10 My '60. (MIRA 13:11)

1. Moskovskiy geologorazvedochnyy institut imeni S.Ordzhonikidze.
(Lenin, Vladimir Il'ich, 1870-1924) (Electrification)
(Engineering geology)

KOMAROV, I.S.; SADOV, A.V.; TAGUNOVA, L.N.

Role of geobotanical methods in the general complex of engineering geological surveys. Trudy MOIP 8:108-114 '64.

(MIRA 17:12)

KOLOMENSKIY, N.V.; DUBROVKIN, V.L. [deceased]; KOMAROV, I.S.

Principles of state mapping from the viewpoint of engineering geology. Sov. geol. 7 no.3:76-80 Mr '64.
(MIRA 17:10)

1. Moskovskiy geologorazvedochnyy institut im. S. Ordzhonikidze.

KOMAROV, I.S.

Developing rapid methods for research in engineering geology in the designing of large reservoirs. Izv. vys. ucheb. zav.; geol. i razv. 7 no.11:86-93 N '64. (MIRA 18:5)

1. Moskovskiy geologorazvedochnyy institut im. S. Ordzhonikidze.

Komarov, I.V.

ISMAGULOV, K.L. (Alma-Ata); POPOV, P.I. (Alma-Ata); KOMAROV, I.V. (Alma-Ata)

"Zero" runs. Put' i put. khoz. no.10:23-24 O '57. (MLRA 10:11)

1. Nachal'nik distantsii (for Ismagulov). 2. Zamestitel' nachal'nika distantsii (for Popov). 3. Starshiy dorozhnyy master (for Komarov).

(Railroads--Management)

KOMAROV, I.V.

KOMAROV, I.V., starshiy dorozhnyy master (Alma-Ata).

Review the track testing period. Put' i put. khoz. no.1:43 Ja '58.
(Railroads--Maintenance and repair) (MIRA 11:1)

KOMAROV, I.V.; KALITIN, N.T., inzh.; KOGAN, N.G., inzh.; LIBKIND, M.Ya., inzh. (Sverdlovsk).

Value of warning signals. Put' i put. khoz. no.2:8-10 F '58. (MIRA 11:3)

1. Starshiy dorozhnyy master, Alma-Ata (for Komarov).
(Railroads--Signaling)

L 22129-66 EWT(1) AT

ACC NR: AP6004948 SOURCE CODE: UR/0056/66/050/001/0286/0294

AUTHOR: Demkov, Yu. N.; Komarov, I. V. 55 B

ORG: Leningrad State University (Leningradskiy gosudarstvennyy universitet)

TITLE: Ionization in slow collisions of two atoms

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 1, 1966, 286-294

TOPIC TAGS: ionization potential, excitation energy, continuous spectrum, ground state, electron energy, line spectrum, wave function, excited state, particle collision

ABSTRACT: The authors consider the reaction $A + B \rightarrow A + B^+ + e$, in which the atoms are in the ground or in the excited states prior to the collision, but the excitation energy is smaller than the ionization potential. The simplest spherically symmetrical model is analyzed by way of an example. It is shown that the problem reduces to an analysis of the interaction of the state with an infinite number of parallel states and with a continuous spectrum, and the case is considered in which one energy level of the system crosses an infinite system of parallel levels adjacent to the ground state of the system AB^+. A general mathematical model is employed which yields the wave function, in the form of a contour integral, for the

Card 1/2

L 22129-66

ACC NR: AP6004948

nonstationary problem of the interaction between a system of parallel states and a state that intersects this system. Use is made of a mathematical formalism which is described elsewhere (DAN SSSR, in press), and whose earlier simpler applications were described by one of the authors earlier (Demkov, ZhETF v. 49, 885, 1965 and others). The kinetic energy of the atoms is assumed to be much higher than the ionization potential, so that the motion of the nuclei can be chosen classically and the corresponding nonstationary problem can be solved. The method can also be used in a quantum description of the nuclear motion which is required when the nuclear energy is near the threshold, provided the system of parallel levels is horizontal or only slightly inclined. The probabilities of ionization and of the formation of highly excited states are derived, and the smooth transition from the discrete spectrum (excitation) to the continuous spectrum (ionization) is traced. The limits of applicability of the theory are considered. Orig. art. has: 3 figures and 22 formulas.

SUB CODE: 20/ SUBM DATE: 28Aug65/ ORIG REF: 009/ OTH REF: 002

Card 2/2 OK

DEMKOV, Yu.N.; KOMAROV, I.V.

Density matrix for a system of noninteracting fermions. Vest. LGU 20 no.10:18-28 '65. (MIRA 18:7)

ACC NR: AP7003213 SOURCE CODE: UR/0056/66/051/006/1712/1721

AUTHOR: Komarov, I. V.; Yanev, R. K. (Research associate)

ORG: [Komarov] - Leningrad State University (Leningradskiy gosudarstvenny universitet); [Yanev] - Institute of Nuclear Sciences "Boris Kidric," Belgrade, Yugoslavia (Institut yadernykh nauk "Boris Kidrich")

TITLE: Molecular-term splitting in two-electron exchange

SOURCE: Zh eksper i teor fiz, v. 51, no. 6, 1966, 1712-1721

TOPIC TAGS: term splitting, charge exchange, asymptotic solution, variational method

ABSTRACT: The purpose of the investigation was to obtain an asymptotic experession for the term splitting produced when two atoms exchange a pair of electrons. It is pointed out that an earlier calculation by a variational method (I. K. Fetisov and O. B. Firsov, ZhETF v. 37, 95, 1959) was in error because of a poorly chosen trial function. It is shown that to obtain correct results it is necessary to choose for the zeroth approximation either the wave function of the isolated atom, or at least a function that approaches it asymptotically. When this is done, an asymptotically exact formula can be obtained for the splitting at large internuclear distances. The influence of th spin of the electrons that do not participate in the exchange is taken into account. The cross sections for double charge exchange in inert gases are calculated and are compared with earlier calculations and with the experimental data. While a rough agreement is observed, it is pointed out that the available ex-

Card 1/2

ACC NR: AP7003213

perimental data pertain to velocities lying near the limit of applicability of the presented theory. Experiments at lower velocities are therefore needed for a more reliable comparison. The authors thank Yu. N. Demkov for interest and valuable discussions. Orig. art. has: 2 figures and 38 formulas.

SUB CODE: 20/ SUBM DATE: 18Apr66/ ORIG REF: 009/ OTH REF: 006

Card 2/2

BONDARENKO, T.M.; GORBOV, V.G. [Horbov, V.H.]; KOMAROV, I.Z.; VOYTOVICH, O.S. [Voitovych, O.S.]; KAMINSKIY, F.T. [Kamins'kyi, F.T.]; YAKOVLEVA, Ye.O. [IAkovlieva, IE.O.]; YAKOVLEV, S.B. [IAkovliev, S.B.]; YAVONENKO, O.Ya. [IAvonenko, O.IA.]; VISHCHUN, I.A., red.; ALEKSANDROV, M.O., tekhn.red.

[Our territory; brief guide-reference book] Nash krai; korotkyi putivnyk-dovidnyk. Mykolaiv, Mykolaivs'ke obl.upr.kul'tury, 1958. 94 p. (MIRA 13:2)

1. Nikolayev. Oblastnyi kraieznavchyi muzei.
(Nikolayev Province--Guidebooks)

KOMAROV, K.

Important factor in solving the basic economic problem. Sots. trud no.3:17-23 Mr '58. (MIRA 13:3)
(Technical education)

SHIRYAYEV, A.F., inzh., red.; KOMAROV, K.I., inzh., red.; DUGINA, N.A., tekhn. red.

[Improving the technology of founding] Sovershenstvovanie tekhnologii liteinogo proizvodstva. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1961. 138 p.
(MIRA 15:2)

1. Uralvagonzavod, Nizhniy Tagil.
(Founding)

KOMAROV, L.

Result of teamwork. Kryl.rod. 7 no.1:16 Ja '56. (MLRA 9:5)

1. Zamestitel' predsedatelya Bryanskogo oblastnogo komiteta Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu.
(Military education)

KOMAROV, L.; SHKIRKIN, G., starshiy nauchnyy sotrudnik; KOLGANOV, N., starshiy nauchnyy sotrudnik

Modernizing the ONK-B sprayer. Zashch. rast. ot vred. i bol. 10 no.10:27-29 '65. (MIRA 18:12)

1. Zaveduyushchiy laboratoriyey Pushkinskoy mashinoispytatel'noy stantsii (for Komarov). 2. Institut sadovodstva imeni I.V. Michurina (for Shkirkin, Kolganov).

KOMAROV, L. (Zlatoust)

"Malysh" in the air. Kryl. rod. 16 no.7:18 Jl '65. (MIRA 18:8)

KOMAROV, LEV ALEKSEYEVICH

Planironvaniye Podgotovki i Raspredeleniya Spetsialistov v SSSR. Moskva, Ekonomizdat, 1961,

104 p. Tables.

Bibliographical Footnotes.

ANDREYEV, V.P.; BUTKOVSKIY, N.I.; KOMAROV, L.A.; KUDINOV, V.S.; MASHANSKIY, G.S.; MERKIN, R.M.; MERKULOV, V.A.; ZEMLYANIKIN, S.A.; SOLOMIN, V.V.; SHOLOKHOV, Ye.I.; PEREPELITSKAYA, A.G., red.; AVDEYEVA, V.A., tekhn. red.

[Toward the new achievements; the Russian Federation in 1963, concise handbook] K novym rubezham; Rossiiskaia Federatsiia v 1963. godu. Kratkii spravochnik. Moskva, Sovetskaia Rossiia, 1963. 284 p. (MIRA 16:10)
(Russia--Economic policy--Handbooks, manuals, etc.)

KOMAROV, L.A.

System for defectless manufacture of articles in enterprises of Saratov Province. Mashinostroitel' no.9:4-6 S '64.
(MIRA 17:10)

1. Zaveduyushchiy otdelom promyshlennosti Saratovskogo promyshlennogo oblastnogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza.

VOLODIN, Boris Grigor'yevich; GANIN, Mikhail Pavlovich; DINER, Isay Yakovlevich; KOMAROV, Lazar' Borisovich; SVESHNIKOV, Aram Arutyunovich, doktor tekhn. nauk, prof.; STAROBIN, Kalman Berkovich; GINZBURG, R.I., kand.tekhn.nauk, retsenzent; CHEREDNICHENKO, N.Ya., kand. tekhn.nauk, retsenzent; SHAYKEVICH, I.A., red.; KONTOROVICH, A.I., tekhn.red.

[Manual for engineers on the solving of problems in probability theory; collection of basic formulas, typical solutions, and problems for exercises] Rukovodstvo dlia inzhenerov po resheniiu zadach teorii veroiatnostei; sbornik osnovnykh formul, tipovykh reshenii i zadach dlia uprazhnenii. [By] B.G.Volodin i dr. Leningrad, Sudpromgiz, 1962. 422 p. (MIRA 15:7)
(Probabilities)

KOMAROV, L. B.

PHASE I BOOK EXPLOITATION SOV/6203

Volodin, Boris Grigor'yevich, Mikhail Pavlovich Ganin, Isay Yakovlevich Diner, Lazar' Borisovich Komarov, Aram Arutyunovich Sveshnikov, Doctor of Technical Sciences, Professor, and Kalman Berkovich Starobin

Rukovodstvo dlya inzhenerov po resheniyu zadach teorii veroyatnostey; sbornik osnovnykh formul, tipovykh resheniy i zadach dlya uprazheniy (Handbook for Engineers on the Solution of Problems in the Theory of Probability; Collection of Basic Formulas, Typical Solutions, and Practice Problems) Leningrad, Sudpromgiz, 1962. 422 p. Errata slip inserted. 14,300 copies printed.

Ed. (Title page): A. A. Sveshnikov; Reviewers: R. I. Ginzburg, Candidate of Technical Sciences, and N. Ya. Cherednichenko, Candidate of Technical Sciences; Ed.: I. A. Shaykevich; Tech. Ed.: A. I. Kontorovich.

PURPOSE: This handbook is intended for engineers, scientific workers, and students at schools of higher education interested in applying formulas of

Card 1/2

2

VOLODIN, B.G.; GANIN, M.P.; DINER, I.Ya.; KOMAROV, L.B.; SVESHNIKOV, A.A., zasl. deyatel' nauki i tekhniki RSFSR, doktor tekhn. nauk, prof.; STAROBIN, K.B.; DONCHENKO, V.V., red.; BLAGOVESHCHENSKIY, Yu.N., red.

[Problems in probability theory, mathematical statistics, and theory of functions of random variables] Sbornik zadach po teorii veroiatnostei, matematicheskoi statistike i teorii sluchainykh funktsii. Moskva, Nauka, 1965. 632 p. (MIRA 18:10)

1. KOMAROV, L. I.

2. USSR (600)

4. Hedges

7. Hedge for an experimental school garden. Est. v shkole no. 1 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

KOMAROV, L.I., mekhanik-defektoskopist (stantsiya Brest Belorusskoy dorogi).

How to improve the UKD-52 defectoscope. Put' i put.khoz. no.12:22 D '58. (MIRA 12:1)
(Railroads—Equipment and supplies)

KOMAROV, L.I., inzh.

Investigating a chopping apparatus with a pneumatic throwing device. Mekh. i elek. sots. sel'khoz. 19 no.4:16-19 '61. (MIRA 14:11)

1. Pushkinskaya mashinoispytatel'naya stantsiya.
(Combines(Agricultural machinery))
(Corn(Maize)--Harvesting)

KOMAROV, L.I.

Second edition of a useful book. Put' i put. khoz. 8 no.10:35 '64. (MIRA 17:12)

1. Stantsiya Brest I Belorusskoy dorogi.

ACCESSION NR: AP4040373 S/0185/64/009/004/0349/0354

AUTHOR: Komarov, L. I.; Fisher, I. Z.

TITLE: Neutron and Optical Spectra as Sources of Information on the Motion of Molecules in Liquids /Paper presented at the Shestoye Soveshchaniye po Fizike Zhidkogo Sostoyaniya Veshchestva, Sixth Conference on the Physics of the Liquid State of Matter, Kiev, 1963/

SOURCE: Ukrayins'ky*y fizy*chny*y zhurnal, v. 9, no. 4, 1964, 349-354

TOPIC TAGS: liquid state, liquid state physics, liquid molecular motion, molecular radial density distribution, molecular correlation function, many-body problem, Van Hove time molecular distribution function, Rayleigh scattering, neutron scattering, fluctuation theory

TRANSLATION: The Van Hove time molecular distribution formalism is introduced and applied to the description of such kinetic properties of condensed phases as correlation and autocorrelation functions and fluctuations. The possibilities of obtaining information about these functions from experimental data are studied

Card 1/2

ACCESSION NR: AP4040373

in detail. It is shown that the Rayleigh scattering spectrum can be used to determine the asymptotic behavior of the Van Hove functions with respect to distance and time. Low energy neutron scattering by liquids is considered in detail with a view toward extracting information about nolecular distributions. The high frequency limit of sound propagation in liquids is considered, and the possibility of the existence of transverse waves in liquids is likewise treated. The phonon approach of solid state usage is modified to treat the neutron scattering problem in liquids. Though neutron scattering differential cross-sections and the angular distribution of Rayleigh scattering are not expected to be precisely conformal, they are expected to be closely related. Very low energy neutron scattering is recommended as a tool for studying the nature of molecular behavior which gives rise to the dispersion of elastic and kinetic coefficients in liquids at the high frequency limit. Orig. art. has 17 numbered equations.

ASSOCIATION: Belorusskiy Gosuniversitet, Minsk (Byelorussian State University)

SUBMITTED: 00	DATE ACQ: 13May64	ENCL: 00
SUB CODE: OP,GP	NO REF SOV: 006	OTHER: 001

Card 2/2

24,3200

43380
S/056/62/043/005/046/058
B125/B104

AUTHORS: Komarov, L. I., Fisher, I. Z.

TITLE: On the theory of the Rayleigh scattering of light in fluids

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 43, no. 5(11), 1962, 1927 - 1933

TEXT: A molecular theory of the intensity and spectrum of the Rayleigh scattering of light in liquids or dense gases is formulated without using the thermodynamical theory of fluctuations. This paper is a transcript of one by L. Van Hove (Phys. Rev., 95, 249, 1954) from the "language" of scattering of neutrons to the "language" of scattering of light. N is the number of molecules contained in the volume V and $R_i(0)$ $(i = 1,2,\ldots,N)$ indicates the position of the particles at a certain initial moment, $R_i(t)$ is their position at a later moment. The spectral density

$$I'(R,\omega) = \frac{\alpha^2\omega^4 N}{2\pi c^4 R^2} I_0 \sin^2\gamma \int_{(V)} dr \int_{-\infty}^{\infty} dt \times \qquad (21)$$

$$\times \exp\left\{i\left(k_0 - \frac{\omega R}{cR}\right)r - i(\omega_0 - \omega)t\right\} G(|r|, t),$$

Card 1/3

of the intensity of the scattered light is a Fourier transform of a space-time molecular Van Hove function $G(|\vec{r}|,t)$ of the scattering system. $\cos\gamma = |\vec{E}_0\vec{R}|/R|\vec{E}_0|$; I_0 and $\vec{E}_0$ are the intensity and the electrical vector of the incident radiation. $G(|r|.t)$ is (with an accuracy up to the coefficient N^{-1}) the density of the relative probability of finding a certain particle, at the instant t, at a distance $\vec{r}$ from the initial position of any given particle in the system. After scattering through the argle of 0° has been excluded, G has to be replaced by G-1. The integration over $d\vec{r}$ can be extended over the entire space. Eq. (21) then leads to the formula

$$I'(R,\omega) = \frac{2\pi^2\omega^4 N}{c^4R^2} I_0 \sin^2\gamma \int_0^\infty r^2\,dr \frac{\sin \varkappa r}{\varkappa r} \int_{-\infty}^{\infty} dt\,(G(r,t)-1)\,e^{i\Omega t}. \quad (25)$$

or, with $G(\vec{r},0) = \delta(\vec{r}) + g(|\vec{r}|)/v$, to the formula

$$I'(R,\omega) = \frac{\alpha^2\omega^4 N}{c^4R^2} I_0 \sin^2\gamma\,\delta(\omega-\omega_0)\left\{1+\frac{4\pi}{v}\int_0^\infty (g(r)-1)\frac{\sin \varkappa r}{\varkappa r} r^2 dr\right\}. \quad (27).$$

In contrast to the static theory, the present dynamic theory yields a certain definite spectrum of the frequencies in scattering. The formulas

(25) and (27) yield equal intensities of the scattered light (aside from corrections of the order of $(v/c)^2$). The polarizability of one molecule in the field of the neighboring molecules is therefore $\alpha = v^2(-\partial\varepsilon/\partial v)_T/4\pi$, where ε is the dielectric constant. Up to now, the spectrum of scattered light cannot be calculated from formula (25).

ASSOCIATION: Belorusskiy gosudarstvennyy universitet (Belorussian State University)

SUBMITTED: June 19, 1962

Card 3/3

ACCESSION NR: AP4000411 S/0046/63/009/004/0427/0433

AUTHORS: Kacharskaya, L. V.; Komarov, L. I.; Fisher, I. Z.

TITLE: Hypersound and slow neutron scattering in liquids

SOURCE: Akusticheskiy zhurnal, v. 9, no. 4, 1963, 427-433

TOPIC TAGS: hypersound neutron wave diffraction, liquid hypersound neutron wave diffraction, high frequency hypersound, hypersound neutron scattering, slow neutron scattering, hypersound slow neutron scattering, hypersound neutron scattering spectrum, hypersonic radiation, neutron scattering, neutron, scattering, hypersound

ABSTRACT: The conditions leading to neutron wave diffraction on hypersounds in liquids are analyzed, and conditions for building an experimental apparatus specified. Slow neutron scattering is found to be the most suitable because of the requirements of very high frequencies for the determination of hypersounds in fluids. The expression for the neutron energy E and momentum p during and after the scattering is represented by

$$E - E_0 = \pm u(\Omega)|p - p_0|,$$

Card 1/3

ACCESSION NR: AP4000411

where $u(\Omega)$ can be calculated by experimentally determining p or E. For small scattering angles θ and small values of $\Delta E/2mu^2$ this expression is written in the form

$$\Delta E \approx \pm \frac{2E_0 \sin\theta}{\sqrt{\frac{2E_0}{mu^2}} - 1}.$$

The discussed neutron diffraction characteristics are shown to have no analogies in optical theory, with auxiliary peaks in the neutron spectrum at zero angle neutron scattering. This effect may yield direct information experimentally on hypersounds in the limits of high frequencies. Orig. art. has: 30 formulas and 1 figure.

ASSOCIATION: Belorusskiy gosudarstvennyy universitet, Minsk (Byelorussian State University)

Card 2/3

[illegible]-65 EWT(m)

[illegible]ION NR: AP5004388 S/0056/65/048/001/0145/0150

[illegible]: Komarov, L. I. 14

[illegible]ontribution to the theory of the bulk viscosity coefficient B

[illegible]Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 48, no. 1, 1965,

[illegible]: bulk viscosity, viscosity [illegible], thermodynamic [illegible], viscous liquid, sound speed

[illegible] shown that by using a [illegible] transformation it is [illegible] separate in the Hamiltonian [illegible] a large number [illegible] the term that describes [illegible] relaxation, and to [illegible] the coefficient of bulk viscosity [illegible] isolated system. [illegible] that the coefficient of bulk viscosity [illegible] adiabatically isolated [illegible] is determined by a complex function [illegible] and some of the properties of this frequency are investigated. The bulk viscosity and the elasticity combined in a single complex coefficient of bulk viscosity, which relates

ACCESSION NR: AP5004388

variation of the trace of the stress tensor to the variation of the density. complex coefficient can be obtained from the Fourier transform of the correlation function of the pressure fluctuations in the system. The mean pressure variation in the adiabatically isolated system is expressed in terms of the coefficient of isotropic compression at high frequencies. The results obtained from thermodynamic (low frequency) fluctuation theory lead to a different expression and the differences between the high- and low-frequency expressions is negligible for liquids with noticeable dispersion of the speed of sound, and are practically the same for low-viscosity liquids. I am grateful to I. Z. Fisher for a critical discussion of the results and for useful advice." Orig. art. has: 32 formulas.

ASSOCIATION: Belorusskiy gosudarstvennyy universitet (Belorussian State University)

SUBMITTED: 25May64 ENCL: 00 SUB CODE: ME, GP

NO REF SOV: 005 OTHER: 006

KOMAROV, L.I., mladshiy nauchnyy sotrudnik

Better organization of cotton fabric dyeing with sulfide dyes. Tekst. prom. 25 no.4:57-59 Ap '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut netkanykh tekstil'nykh materialov.

L 20801-66 EWP(j)/EWT(m)/ETC(m)-6/T IJP(c) RM/WW

ACC NR: AP6005951 SOURCE CODE: UR/0191/66/000/002/0033/0035

AUTHORS: Korshak, V. V.; Sergeyev, V. A.; Kozlov, L. V.; Komarova, L. I.

ORG: none

TITLE: Thermal and thermooxidative destruction of phenolformaldehyde oligomers of novolac type

SOURCE: Plasticheskiye massy, no. 2, 1966, 33-35

TOPIC TAGS: phenolformaldehyde, oligomer, thermal decomposition, oxidation

ABSTRACT: Chemical processes occurring in novolac phenolformaldehyde oligomers upon heating at 150--900C have been investigated by elementary analysis, titration for OH groups, and ESR and IR spectral analysis. Oligomers were prepared according to the method described by K. A. Andrianov and D. A. Kardashev (Prakticheskiye raboty po iskusstvennym smolam i plastmassam, ONTI, 1936, str. 198), washed repeatedly with distilled water, and dried at 150C/1--2 mm for 15 hours. The product, containing 2% of free phenol, was subjected to thermal and thermooxidative treatment for 3--4 hours. It was established that the primary act in thermooxidative destruction was oxidation of methyl groups. Cross-linking during thermal

Card 1/2

UDC: 678.632'32'21.01:536.45

L 20801-66

ACC NR: AP6005951

treatment of the novolac oligomers mainly occurs due to formation of aromatic etheral bonds. This process is facilitated by conversion of polymeric hydrogen bonds to dimeric ones. Orig. art. has: 2 tables and 2 figures.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 008

Card 2/2

KOMAROV, L. L. Cand Agr Sci -- "Economic effectiveness of the raising of young cattle for slaughtering under conditions of the central chernozem zone .(According to the example of Kostromskaya Oblast)." Mos, 1961 (All-Union Sci Res Inst of Animal Husbandry. Dept of Economics and Organization of Animal Husbandry). (KL, 4-61, 204)

KIRILLIN, V.A.; SHEYNDLIN, A.Ye; KOMAROV, L.P., redaktor; VORONIN, K.P., tekhnicheskiy redaktor.

[Steam in power engineering] Vodianoi par v energetike. Moskva, Gos. energeticheskoe izd-vo, 1953. 94 p. (MLRA 7:8)
(Steam engineering)

BEL'KIND, Lev Davidovich; KONFEDERATOV, Ivan Yakovlevich; SHNEYBERG, Yakov Abramovich; KOMAROV, L.P., redaktor; ANTIK, I.V., redaktor; VORONIN, K.P., tekhnicheskiy redaktor

[A history of technology] Istoriia tekhniki. Moskva, Gos. energ. izd-vo, 1956. 491 p. (MLRA 9:12)
(Technology--History)

KOMAROV, L.P.

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

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

KOMAROV, L.P.

KOSTOMAROV, V.M.; POKROVSKIY, Yu.M., kandidat tekhnicheskikh nauk, retsenzent; KOMAROV, L.P., inzhener, redaktor; STUPIN, A.K., redaktor izdatel'stva; UVAROVA, A.P., tekhnicheskiy redaktor

[Activities of the Russian Engineering Society in promoting machinery manufacture] Iz deiatel'nosti Russkogo tekhnicheskogo obshchestva v oblasti mashinostroeniia. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1957. 177 p. (MLRA 10:7)
Mechanical engineering--History)

KOMAROV L.P.

KOMAROV, L.P.; RASSKAZOV, D.S.

Survey of the history of studies of steam heat capacity. Vop. ist. est. i tekh. no.3:142-157 '57. (MIRA 11:1)
(Steam--History)

KOMAROV, L.P., Cand Tech Sci--(diss) "Study of water ~~steam~~ vapor in connection with the development of ~~thermo~~ heat power engineering." Mos, 1958. 24 pp (Acad Sci USSR. Inst of the History of Natural Sci~~ence~~ and Engineering), KL,46-58,140)

BELINSKIY, Semen Yakovlevich; VUKALOVICH, M.P., red.; KIRILLIN, V.A., red.; KOMAROV, L.P., red.; MEYKLER, M.V., red.; TYURIN, P.Ya., red.; SKVORTSOV, A.A., red.; LARIONOV, G.Ye., tekhn.red.

[Heat and electric power plants and heating from central stations] Teplofikatsiia i teplofelektrotsentrali. Moskva, Gos.energ.izd-vo, 1960. 86 p. (Biblioteka teplotekhnika, no.4). (MIRA 13:9)
(Heating from central stations)
(Electric power plants)

KOMAROV, L.P.

Development of research on the thermodynamic properties of steam.
Vop.ist.est.i tekh. no.10:148-150 '60. (MIRA 14:3)
(Steam)

MEYKLYAR, Mikhail Vladimirovich; VUKALOVICH, M.P., red.; KIRILLIN, V.A., red.; KOMAROV, L.P., red.; TYURIN, P.Ya., red.; TROYANSKIY, Ye.A., red.; BORUNOV, N.I., tekhn. red.

[Engineering performance of the metal of a steam boiler] Kak rabotaet metall parovogo kotla. Moskva, Gos. energ. izd-vo, 1961. 93 p. (Biblioteka teplotekhnika, no.8) (MIRA 14:8)
(Boilers) (Metals)

GURVICH, Semen Markovich; MAMET, A.P., doktor tekhn. nauk, retsenzent; KOMAROV, L.P., red.; VORONIN, K.P., tekhn. red.

[Water treatment] Vodopodgotovka. Moskva, Gos. energ. izd-vo, 1961. 239 p. (MIRA 15:2)
(Feed-water purification)

KROL', Lazar' Borisovich; KOMAROV, L.P., red.; LARIONOV, G.Ye., tekhn. red.

[Principal features of high-pressure and super-high pressure boiler units]Osnovnye osobennosti kotel'nykh agregatov vysokogo i sverkhkriticheskogo davleniia. Moskva, Gosenergoizdat, 1962. 239 p. (MIRA 15:12)

(Boilers)

MEYKLYAR, Mikhail Vladimirovich; KOMAROV, L.P., red.; BUL'DYAYEV, N.A., tekhn. red.

[High-pressure steam boiler units manufactured at the Taganrog Boiler Plant] Parovye kotel'nye agregaty TKZ vysokogo davleniia. Moskva, Gosenergoizdat, 1963. 168 p. (MIRA 17:2)

IDASHKIN, S.I., kand. tekhn. nauk; LAMPEKO, S.N., retsenzent [deceased]; KARAMYSHEV, I.A., nauchnyy red.; KOMAROV, L.S., red.; DEMIDOV, Ya.F., tekhn. red.

[Precast reinforced-concrete tanks] Sbornye zhelezobetonnye rezervuary. Moskva, VNIIST Glavgaza SSSR, redaktsionno-izdatel'skii otdel, 1960. 149 p. (MIRA 14:5)
(Precast concrete construction) (Tanks)

YEVSTROPOV, Nikolay Alekseyevich; KOMAROVA, L.S., red.; DEMIDOV, Ya.F., tekhn. red.

[Theory and practice of blasting operations in mining and construction] Voprosy teorii i praktiki vzryvnykh rabot v gornoi promyshlennosti i stroitel'stve. Moskva, VNIIST Glavgaza SSSR, Red.-izd.otdel, 1961. 44 p. (MIRA 15:8)
(Blasting)

KOMAROV, L. V.

PA 29/49T52

USSR/Medicine - Physiology, Experimental Feb 49
Medicine - Cold, Effects of

"Experiments in the Revivification of Rabbit Ears Frozen in Liquid Oxygen," L. V. Komarov, Irkutsk Med Inst, 3 pp

"Dok Ak Nauk SSSR" Vol LXIV, No 5

States that the experiment in revivification of a rabbit's ear, frozen at - 183°, is one of the first steps toward solving the problem of complete anabiosis of warm-blooded animals. Submitted by Acad L. A. Orbeli, 10 Dec 48.

29/49T52

KOMAROV, L. V.

30130. KOMAROV, L. V. Opyt razdel'nogo okhlazhdeniя tulovishcha i golovy teplokrovnogo pri bolee bystrom snizhenii temperatury tulovishcha. (Akademiя nauk SSSR. Doklady. Novaя seriя, Sept. 1951. t. 80, no. 2, p. 281–83, table) ***Title tr.***: Experiments on separate cooling of the trunk and head in warm-blooded animals with quicker lowering of temperature of the trunk.

Contains an account of 22 experiments with cats whose trunks were cooled with snow, or snow and water while the heads were kept in warm water or air. Respiration, heartbeat, rectal and oral temperatures were recorded as well as the temperatures at which respiration ceased.

Copy seen: DLC.

IRKUTSK Med. INST.

KOMAROV, L.V.

Installation for studying unconditional local defense motor activity in hypothermia. Trudy Inst. vys. nerv. deiat. Ser. fiziol. 3:232-238 '59. (MIRA 12:3)

1. Iz laboratorii obshchey fiziologii nervnoy sistemy, zav. - V.S. Rusinov.

(REFLEXES) (PHYSIOLOGICAL APPARATUS)

KOMAROV, L.V.

Some individual characteristics of local unconditioned reflex defense activity in white rats. Trudy Inst. vys. nerv. deiat. Ser. fiziol. 6:324-331 '61. (MIRA 14:12)

1. Iz Laboratorii obshchey fiziologii tsentral'noy nervnoy sistemy zhivotnykh, zav. - V.S.Rusinov.
(REFLEXES)

KOMAROV, L.V.

Age-related changes occurring in a localized defensive unconditioned reaction in white rats. Trudy Inst.vys.nerv.deiat. Ser.fiziol. 7:279-287 '62. (MIRA 16:2)

(REFLEX) (AGE)

KOMAROV, L. V.

Programme of Radically Prolonging the Human Life Span
Exercise and Human Performance

Gerontalogy, 6th International Congress, Copenhagen, Denmark
11-16 August 1963

KOMAROV, L.V.

Radical increase of the span of life. Trudy MOIP.Otd.biol.6: 70-78'62. (MIRA 16:7)

1. The Moscow Society of Naturalists, Section of Gerontology. (LONGEVITY)

KOMAROV, L.Ye.

KOMAROV, L.Ye.

Packing foundry molds by means of pressing, vibro-pressing and vibration. Lit. proizv. no.11:10-15 N '57. (MIRA 10:12)
(Molding (Founding))

KOMAROV, L. Ye., Cand of Tech Sci -- (diss) "Studying the Processes of Compacting Casting Moulds," Moscow, 1959, 16 pp (Ministry of Higher and Secondary Special Education, USSR. Moscow Higher Technological School im Bauman) (KL, 7-60, 108)

18(0)
AUTHOR: Komarov, L. Ye. SOV/30-59-7-45/50

TITLE: Scientific Basis of Production Methods in Foundries (Nauchnoye obosnovaniye metodov liteynogo proizvodstva)

PERIODICAL: Vestnik Akademii nauk SSSR, 1959, Nr 7, pp 119-120 (USSR)

ABSTRACT: The Institut mashinovedeniya Akademii nauk SSSR (Institute of Mechanical Engineering, Academy of Sciences, USSR) held a conference on the theory of casting in Moscow, April 22-24. It was devoted to problems of improving the quality of the products and increasing the accuracy of castings. V. I. Dikushin stated in his inaugural address that the country's industry each year had to transform more than 2,000,000 t of metal from castings into chips. Scientists, engineers, and technologists ought therefore to endeavor as quickly as possible to find ways and means of how to approximate the dimensions of raw castings to those of the finished parts. B. B. Gulyayev stated that the development in the field of accuracy in foundry production was carried out too slowly and not to the extent necessary. P. N. Aksenov reported on the main tasks of accuracy investigations of castings in dependence on technological factors and recommended in particular

Card 1/2

the methodology developed by V. M. Shestopalov. P. P. Berg examined the concept of nominal dimensions with reference to castings. Yu. Ya. Vorob'yev furnished data on theoretical and experimental investigations of the accuracy of castings. I. P. Yegorenkov reported on the development of a system of admixtures for the dimensions of the castings. An analysis of the effect of admixtures on the dimensions of cast parts was given by Ye. G. Kopanevich and S. A. Kazennov. G. I. Nikol'skiy, L. Ye. Komarov, S. S. Zhukovskiy, V. O. Yakovlev, S. N. Fomchenko, B. B. Gulyayev reported on the cleanness and accuracy of cast parts. I. F. Kolchin and V. V. Ryzhenkov described experiments aiming at an improvement of the cleanness and accuracy of large castings in sand molds. M. P. Ivanov presented the results of investigations in regard of the influence of the chemical composition of cast iron on the accuracy of castings. The reports by N. N. Rubtsov and I. L. Zelikov, B. B. Gulyayev and M. F. Makel'skiy, I. I. Goryunov, Ye. N. Mikheyeva were devoted to questions of the accuracy of castings safeguarded by special methods. The conference outlined the further development program for the comprehensive study of questions of casting accuracy.

KOMAROV, L.YE.

Akademiya nauk SSSR. Institut mashinovedeniya

Trudy, tom 1: Vtoraya nauchno-tekhnicheskaya konferentsiya aspirantov i mladshikh nauchnykh sotrudnikov (Transactions of the Institute of Machine Science, Academy of Sciences, USSR, Vol 1: Second Scientific and Technical Conference of Aspirants and Junior Scientific Workers) Moscow, 1959. 182 p. Errata slip inserted. 1,000 copies printed.

Resp. Ed.: A.K. D'yachkov, Doctor of Technical Sciences, Professor; Tech. Ed.: B.K. Shorin.

PURPOSE: This book is intended for technical personnel engaged in the design of machines and mechanisms.

COVERAGE: This collection of scientific papers, presented at a conference held July 2-3, 1958, deals with the theory of machines and mechanisms, strength of machine parts, friction and wear in machines, and machine-building technology.

Results of theoretical and experimental investigations of the process of transition through resonance in mechanical vibrating systems are presented. The results of an investigation of resonance properties of a centrifugal vibrator with non-linear restoring force are discussed.

Vibrations of shafts with different principal-inertia moments during transition through the zone of static instability are investigated. Equations of motion and methods for their solution are presented.

Basic theoretical considerations on the selection of methods for cutting splines in shafts are developed. Broaching and planing are experimentally investigated and recommended as the most efficient methods for cutting splined shafts in large-lot and mass production.

The effect of vibrations on the process of compacting molds by compression is investigated. Results indicate that vibrations make it possible to obtain uniformity of density at compression pressures several times lower than those used in compacting without vibration.

The relationship between the actual contact area (consisting of elastic and plastic contact areas), the surface roughness, and the material properites of two surfaces in contact is investigated. Results indicate that the size of the actual contact area is considerably affected by the geometry of the surface.

An experimental investigation was made of the accuracy of determining metal wear by the indentation method, involving measurement of the length and calculation of the reduction of depth of a crescent-shaped recess cut into the metal surface. The method of investigation and the special instruments used are described.

Lubricant flow in the bath and between shoes of a thrust bearing (without cooling) was investigated by a thermo-anemometric method. A testing machine, built for this purpose at the Hydrodynamic Friction Laboratory, Institut mashinovedeniya, AN SSSR (Institute of Machine Science, Academy of Sciences, USSR), is used. The results of the investigation are described.

The author discusses an experimental and theoretical investigation of stresses in composite and solid frame structures. The non-linear distributions of stresses and strains are shown in diagrams.

PHASE I BOOK EXPLOITATION SOV/4199

Leningrad. Politekhnicheskiy institut

Sovremennyye dostizheniya liteynogo proizvodstva; trudy mezhvuzovskoy nauchno-tekhnicheskoy konferentsii (Recent Achievements in Founding: Transactions of the Scientific and Technical Conference of Schools of Higher Education) Moscow, Mashgiz, 1960. 336 p. Errata slip inserted. 4,000 copies printed.

Resp. Ed.: Yu. A. Nekhendzi, Doctor of Technical Sciences, Professor; Eds.: N. G. Girshovich, Doctor of Technical Sciences, Professor, and K. P. Lebedev, Docent; Managing Ed. for Literature on Heavy Machine Building (Leningrad Department, Mashgiz): Ye. P. Naumov, Engineer; Tech. Eds.: Ye. A. Dlugokanskaya, and L. V. Shchetinina.

PURPOSE: This book is intended for the technical personnel of foundries. It may be used by students of the field.

COVERAGE: This collection of articles discusses problems in founding processes. Individual articles treat the melting of metals and their alloys, mechanization and automation of casting processes, aspects of the manufacture of steel, cast iron, and nonferrous metal castings. No personalities are mentioned. References accompany individual articles.

Recent Achievements in Founding (Cont.) SOV/4199

Card 6/9

(6)

Komarov, L. Ye.

RAKOGON, V.G.; KOMAROV, L.Ye.

Manufacture of foundry molds by hinge and lever presses. Lit. proizv. no. 8:27-31 Ag '60. (MIRA 14:2)
(Molding (Founding)) (Foundries--Equipment and supplies)

KOMAROV, L. Ye.

PHASE I BOOK EXPLOITATION SOV/5304

Sovashchaniye po teorii liteynykh protsessov. 5th, 1959

Tochnost' otlivok; trudy sovashchaniya (Accuracy of Castings; Transactions of the Fifth Conference on the Theory of Founding Processes) Moscow, Mashgiz, 1960. 206 p. 3,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya. Komissiya po tekhnologii mashinostroyeniya.

Ed. (Title page): B. B. Gulyayev, Doctor of Technical Sciences, Professor; Ed. of Publishing House: G. M. Sobolevaya; Tech. Ed.: A. F. Ovarova; Managing Ed. for Literature on Hot-Processed Metals: S. Ya. Golovin, Engineer.

PURPOSE: This book is intended for scientific and technical personnel at scientific research institutes, factories, and schools of higher education.

COVERAGE: The book contains 19 reports read at a conference on the accuracy of castings. The conference was organized by the Committee on Processing in Machine Building and sponsored by the Institut mashinovedeniya AN SSSR (Institute of the Science of Machines of the Academy of Sciences USSR). The reports, presented by leading specialists, science workers, and production personnel, discuss the present state of the problem of the accuracy of castings and methods of solving the problem involved. There are 58 references, mostly Soviet.

Komarov, L. Ye. [Engineer]. Distortion of Sand Molds

Zhukovskiy, S. S. [Engineer], and Yd Ta'unn-chin [Engineer]. Dimensional Errors of Castings Caused by Patterns and Flasks 125

Dobrovitskiy, A. M. [Engineer]. Effect of Thermal Distortion of the Molding Mixtures on the Accuracy of Castings 131
The work of investigating the distortions and thermal stress in the molding mixtures was carried out under the supervision of F. P. Berg.

Feschenko, S. I. [Engineer], and B. B. Gulyayev. Production of Precision Castings in Shell Molds Pressed From a Waterglass Mixture 146

Kolchin, I. F. [Engineer], and V. V. Rychenkov [Engineer]. Production of Large Precision Steel Castings by Using Chemically Hardening Mixtures 153

Rubtsov, N. M. [Doctor of Technical Sciences, Professor], and I. L. Zaitkov [Engineer]. Dimensional Accuracy of Investment Castings 160

Gorynov, I. I. [Candidate of Technical Sciences]. Dimensional Accuracy and Surface Roughness of Castings Obtained by Various Methods 180
O. A. Kantor, A. Ya. Danilov, A. I. Belyayev, and Engineer V. B. Shul'man participated in making castings.

Makel'skiy, M. F. [Engineer], and B. B. Gulyayev. Formation of the Contours of Castings in Die Casting 193

Kolesnichenko, A. G. [Engineer]. Accuracy of Castings Obtained In Metal Molds 203

Card 6/7

KOMAROVA, L.Ye.

Redesigning of a chemical feed-water purification system.
Energetik 10 no.3:18 Mr '62. (MIRA 15:2)

1. Nachal'nik khimicheskogo tsekha Bogoslovskoy teploelektrotsentrali.
(Feed-water purification)

KOMAROV, L.Ye.

Congress of foundrymen of the Likhachev Automobile Plant in Moscow. Lit.proizv. no.7:43-44 Jl '62. (MIRA 16:2)
(Founding--Congresses)

KOMAROV, L.Ye., kand.tekhn.nauk

Research and operations in foundries of the Likhachev Automobile Plant in 1961. Biul.tekh.-ekon.inform.Gos.nauch.-issl.inst.nauch. i tekh.-inform. no.8:15-19 '62. (MIRA 15:7)
(Moscow—Founding) (Moscow—Automobile industry)