

SHAUB, Yu.B.

Using the helicopter variant of the induction method in electric mapping. Izv. AN SSSR. Ser. geofiz. no.2:213-217 F '62.

(MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i tekhniki razvedki.

(Electric prospecting)

(Aeronautics in geology)

SHAUB, Yu.B.

Effect of specific resistivity of the enclosing medium on the form of anomaly curves in electrostatic prospecting. Izv. AN SSSR. Ser.geofiz. no.5:652-658 My '62. (MIRA 15:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i tekhniki razvedki.

(Electric prospecting)

SHAUB, Y. B.

Airborne electric prospecting by the method of a rotating magnetic field, using Li-2 and AN-2 airplanes. Izv. AN SSSR. Ser. geofiz. no. 7: 925-933 J1 '62. (MIRA 15:7)

Il. Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i tekhniki razvedki.

(Electric prospecting) (Aeronautics in geology)

SHAUB, Yu.B.

Evaluation of the efficiency of the helicopter variant of the  
induction method. Izv.AN SSSR.Ser.geofiz. no.8:1070-1075 Ag  
162. (MIRA 15:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i  
tekhniki razvedki.

(Electric prospecting) (Aeronautics in surveying)

42236  
S/785/62/000/011/001/001

AUTHOR Sinab, Yu. B.

TITLE: A highly noiseproof sensitive phasemeter.

SOURCE: USSR. Ministerstvo geologii i okhrany nedr. Osoboye konstruktorskoye  
uro. Geofizicheskoye priborostroyeniye, no. 11. Leningrad, 1962, 22-25.

TEXT: This is the description of a phasemeter with a semiconductor commu-  
tation arrangement, which enhances the noiseproof character of the instrument by  
the insertion of narrow-band selective filters without any impairment of its stability.  
Previously (Geofizicheskoye priborostroyeniye, no. 9, 1961) the author had shown  
how to eliminate the instability of phasemeters that is engendered by the introduction  
of narrow-band RC or LC filters. The combination of low phase shifts ( $<1^\circ$ ), high  
sensitivity requirements (threshold at  $<0.01^\circ$ ), and elevated prevailing noise levels  
occurs in many applications (e.g., in electrical prospecting). In essence, the two  
voltages between which the phase shift is to be measured are fed to a pair of triode  
triodes which alternately cut off one-half period of the one signal and the opposite  
one-half period of the other signal. The voltage is then fed to an RC-filter-equipped  
amplifier. This amplifier can be selective, since it serves both signals jointly and,  
nevertheless, phase instability that it may have does not affect the result of the

Car 1/4

SHAUB, Yu.B.

Relative and absolute measurements in aerial electric prospecting. Geofiz. prib. no. 12:3-10 '62. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i tekhniki razvedki Gosudarstvennogo geologicheskogo komiteta SSSR.

SHAUB, Yu.B.

Technique for increasing the sensitivity and noise immunity  
of measuring systems in aerial electric prospecting. Geofiz.  
prib. no. 12:32-34 '62. (MIRA 17:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i  
tehniki razvedki Gosudarstvennogo geologicheskogo komiteta  
SSSR.

SECRET

... the presence of a strong ...

... komiteta ...

SHAUB, Yuriy Borisovich; IVOCHKIN, V.G., nauchn. red.; IONINA, I.N.,  
ved. red.; DEM'YANENKO, V.I., tekhn. red.

[Principles of aerial electric prospecting with the use of  
a rotating magnetic field] Osnovy aereoel'ektorazvedki me-  
todom vrashchaliushchegosia magnitnogo polia. Leningrad,  
Gostoptekhizdat, 1963. 227 p. (MIRA 17:1)  
(Electric prospecting)

SHAUB, Yu. B.

Using correlation analysis for processing geophysical data.  
Izv. AN SSSR. Ser. geofiz. no. 4: 578-589 Ap. '63. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metodiki i  
tekhniki razvedki.  
(Prospecting--Geophysical data)

ACCESSION NR: AR4041558

S/0274/64/000/004/A091/A091

SOURCE: Ref. zh. Radiotekhnika i elektrosvyaz'. Svodny\*y tom, Abs. 4A540

AUTHOR: Shaub, Yu B.

TITLE: Amplitude-phase measuring device without phase-sensitive detectors

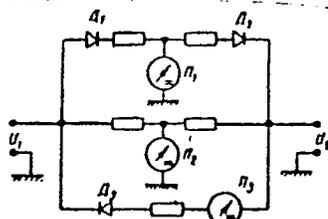
CITED SOURCE: Sb. Geofiz. priborostr. Vy\*p. 16, L., Gostoptekhizdat, 1963, 38-45

TOPIC TAGS: phase sensitive detector, phase sensitivity, amplitude phase measuring device, phase measurement

TRANSLATION: The instrument is intended for measurement of difference of amplitudes with error of 0.1% and phase shifts with error of 1° in range of frequencies from 8 kilocycles to 1 megacycle. It consists of two initial-phase amplification channels and balancing and a measuring part (see figure). Input voltages, after

Card 1/2

ACCESSION NR: AR4041558



amplification and initial balancing, pass to 2 inputs  $U_1$  and  $U_2$ . Instrument  $n_1$  measures difference  $\Delta U = U_1 - U_2$ . Instrument  $n_2$  measures mean value  $U_0 = (U_1 + U_2)/2$ . Instrument  $n_3$  measures vector difference  $(U_1 - U_2)$ . Measured phase shift is determined by the formula  $\Delta\varphi = \sqrt{\frac{\Delta U^2 - \delta U^2}{U_0^2}}$ . There is given fundamental circuit of instrument, designed using 11 pentodes and four diodes. Method of tuning and calibration is described.

SUB CODE: EC

ENCL: 00

Card 2/2

SHAUB, Yu. P.

Direct observation of one or several electric vectors on the  
screen of an electron oscillograph. *Biul. nauch.-tekh. inform.*  
VIMS no.2:81-82 '63. (MIRA 18:2)

L 46283-65 EWT(1) Po-4/Pi-4 GS/GW

ACCESSION NR: AT5009047

S/0000/64/001/000/0083/0087

AUTHOR: Shaub, Yu. B. (Leningrad)

23  
B+1

TITLE: New methods of measurement in aerial electric prospecting 12  
977

SOURCE: Konferentsiya po avtomaticheskomu kontrolyu i metodam elektricheskikh iz-  
mereniy. 3d, Novosibirsk, 1961. Avtomaticheskii kontrol' i metody elektricheskikh  
izmereniy; trudy konferentsii, t. 1: Metody elektricheskikh izmereniy. Analiz i  
sintez sistem upravleniya i kontrolya. Elementy ustroystv avtomaticheskogo kontro-  
lya (Automatic control and electrical measuring techniques; transactions of the  
conference, v. 1: Electrical measuring techniques. Analysis and synthesis of re-  
gulation and control systems. Elements of automatic control devices). Novosibirsk,  
Redizdat Sib. otd. AN SSSR, 1964, 83-87

TOPIC TAGS: aerial electric prospecting, geophysical prospecting, measuring in-  
strument

ABSTRACT: The article describes equipment for aerial prospecting by the method of  
rotating magnetic field, for which the Laboratory of Aerial Electric Prospecting of  
VITR (All-Union Research Institute of Prospecting Techniques) has developed two

Card 1/2

L 46283-65

ACCESSION NR: AT5009047

comparison meters with commutators. The instruments are designed for relative measurements, which are more accurate than absolute measurements. Advantages of increased interference immunity, reduced phase instability, and simpler operation are claimed for the equipment. A decrease of one order of magnitude in noise background was observed with the equipment during field tests (from an equivalent of  $10^{-9}$  to an equivalent of  $10^{-10}$  Oe). Two variants of the instrument are described. Orig. art. has: 2 figures. 0

ASSOCIATION: None

SUBMITTED: 13Apr64

ENCL: 00

SUB CODE: ES, IE

NR REF SOV: 006

OTHER: 000

*M*  
Card 2/2



1. 1955

2. 1956

3. 1957

ed. 1917.

1. 1. Antanasov's review of A. V. Velikof's book. (MIRA 1919)  
Sofia. prib. no. 19:109-111. 1917.

1. 1971-1972.

1. 1971-1972. (1) 1971-1972. (2) 1971-1972. (3) 1971-1972. (4) 1971-1972. (5) 1971-1972. (6) 1971-1972. (7) 1971-1972. (8) 1971-1972. (9) 1971-1972. (10) 1971-1972. (11) 1971-1972. (12) 1971-1972. (13) 1971-1972. (14) 1971-1972. (15) 1971-1972. (16) 1971-1972. (17) 1971-1972. (18) 1971-1972. (19) 1971-1972. (20) 1971-1972. (21) 1971-1972. (22) 1971-1972. (23) 1971-1972. (24) 1971-1972. (25) 1971-1972. (26) 1971-1972. (27) 1971-1972. (28) 1971-1972. (29) 1971-1972. (30) 1971-1972. (31) 1971-1972. (32) 1971-1972. (33) 1971-1972. (34) 1971-1972. (35) 1971-1972. (36) 1971-1972. (37) 1971-1972. (38) 1971-1972. (39) 1971-1972. (40) 1971-1972. (41) 1971-1972. (42) 1971-1972. (43) 1971-1972. (44) 1971-1972. (45) 1971-1972. (46) 1971-1972. (47) 1971-1972. (48) 1971-1972. (49) 1971-1972. (50) 1971-1972. (51) 1971-1972. (52) 1971-1972. (53) 1971-1972. (54) 1971-1972. (55) 1971-1972. (56) 1971-1972. (57) 1971-1972. (58) 1971-1972. (59) 1971-1972. (60) 1971-1972. (61) 1971-1972. (62) 1971-1972. (63) 1971-1972. (64) 1971-1972. (65) 1971-1972. (66) 1971-1972. (67) 1971-1972. (68) 1971-1972. (69) 1971-1972. (70) 1971-1972. (71) 1971-1972. (72) 1971-1972. (73) 1971-1972. (74) 1971-1972. (75) 1971-1972. (76) 1971-1972. (77) 1971-1972. (78) 1971-1972. (79) 1971-1972. (80) 1971-1972. (81) 1971-1972. (82) 1971-1972. (83) 1971-1972. (84) 1971-1972. (85) 1971-1972. (86) 1971-1972. (87) 1971-1972. (88) 1971-1972. (89) 1971-1972. (90) 1971-1972. (91) 1971-1972. (92) 1971-1972. (93) 1971-1972. (94) 1971-1972. (95) 1971-1972. (96) 1971-1972. (97) 1971-1972. (98) 1971-1972. (99) 1971-1972. (100) 1971-1972.
2. 1973-1974. (1) 1973-1974. (2) 1973-1974. (3) 1973-1974. (4) 1973-1974. (5) 1973-1974. (6) 1973-1974. (7) 1973-1974. (8) 1973-1974. (9) 1973-1974. (10) 1973-1974. (11) 1973-1974. (12) 1973-1974. (13) 1973-1974. (14) 1973-1974. (15) 1973-1974. (16) 1973-1974. (17) 1973-1974. (18) 1973-1974. (19) 1973-1974. (20) 1973-1974. (21) 1973-1974. (22) 1973-1974. (23) 1973-1974. (24) 1973-1974. (25) 1973-1974. (26) 1973-1974. (27) 1973-1974. (28) 1973-1974. (29) 1973-1974. (30) 1973-1974. (31) 1973-1974. (32) 1973-1974. (33) 1973-1974. (34) 1973-1974. (35) 1973-1974. (36) 1973-1974. (37) 1973-1974. (38) 1973-1974. (39) 1973-1974. (40) 1973-1974. (41) 1973-1974. (42) 1973-1974. (43) 1973-1974. (44) 1973-1974. (45) 1973-1974. (46) 1973-1974. (47) 1973-1974. (48) 1973-1974. (49) 1973-1974. (50) 1973-1974. (51) 1973-1974. (52) 1973-1974. (53) 1973-1974. (54) 1973-1974. (55) 1973-1974. (56) 1973-1974. (57) 1973-1974. (58) 1973-1974. (59) 1973-1974. (60) 1973-1974. (61) 1973-1974. (62) 1973-1974. (63) 1973-1974. (64) 1973-1974. (65) 1973-1974. (66) 1973-1974. (67) 1973-1974. (68) 1973-1974. (69) 1973-1974. (70) 1973-1974. (71) 1973-1974. (72) 1973-1974. (73) 1973-1974. (74) 1973-1974. (75) 1973-1974. (76) 1973-1974. (77) 1973-1974. (78) 1973-1974. (79) 1973-1974. (80) 1973-1974. (81) 1973-1974. (82) 1973-1974. (83) 1973-1974. (84) 1973-1974. (85) 1973-1974. (86) 1973-1974. (87) 1973-1974. (88) 1973-1974. (89) 1973-1974. (90) 1973-1974. (91) 1973-1974. (92) 1973-1974. (93) 1973-1974. (94) 1973-1974. (95) 1973-1974. (96) 1973-1974. (97) 1973-1974. (98) 1973-1974. (99) 1973-1974. (100) 1973-1974.

L 33253-66 EWT(1) GW

ACC NR: AT6012785

(N)

SOURCE CODE: UR/3175/66/000/027/0043/0050

AUTHOR: Shaub, Yu.B.; Zhurkin, Yu. F.

3/  
B+1

ORG: VIRG

TITLE: Simulation of inertial distortions in aerogeophysical anomalies

12

SOURCE: USSR. Gosudarstvennyy geologicheskiiy komitet. Osoboye konstruktorskoye byuro. Geofizicheskaya apparatura, no. 27, 1966, 43-50

TOPIC TAGS: prospecting, geophysic instrument, aerial survey, signal distortion

ABSTRACT: This paper discusses the distortion of geophysical anomaly signals by airborne prospecting instruments. Velocity, altitude and instrument time constant create a distorting inertial lag, which depends upon the system's inertial parameter  $B = vz/h$ , where  $\tau$  - time constant (adjustable) of the instrumentation,  $v$  - flight velocity,  $h$  - altitude. Simulation of the distorted anomalies was desired to plan optimum values of the inertial parameter  $B$ , and select a suitable instrument time constant. Simulation showed the decrease in recorded anomaly intensity, the shift of the anomaly center, and the shape of the distorted typical anomalies. Three typical undisturbed anomaly functions,  $\phi_1, \phi_2, \phi_3$  were selected, Fig. 1. The simulator produced the disturbed anomaly functions by analogue circuitry from the internally generated undistorted anomaly functions, applying their signals to to an inertia simulating block connected to

Card 1/2

L 33253-66

ACC NR: AT6012785

an oscilloscope. The results were photographed. The distorted curves of the  $\phi_2$  anomaly function are shown in Fig. 2 for several magnitudes of the inertial parameter B.

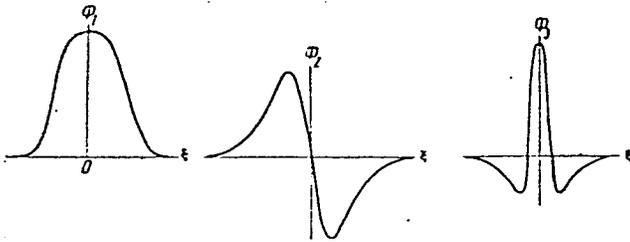


Fig. 1. Typical undistorted anomaly functions.

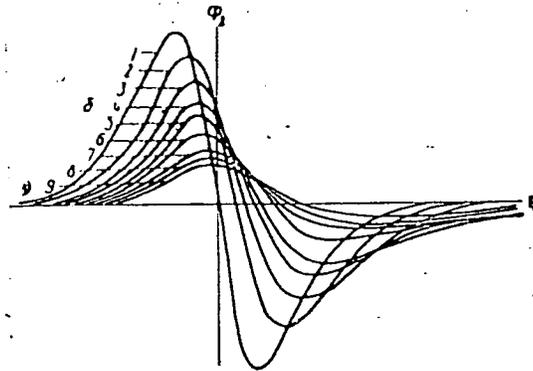


Fig. 2. Simulated distorted anomaly functions for: 1 - B= 0; 4 - B= .8; 6 - B= 1.5; 8 - B= 2.5; 9 - B= 3.0

Orig. art. has 5 figures.

SUB CODE: 08/

SUBM DATE: 00/

ORIG REF: 003

Card 2/2

BUZO, S.A. (Leningrad); SHAUFLER, D.Ya.; SURIN, N.M. (g.Nal'chik); FIRSOV, K.;  
TEBEN'KOV, B.K.

Useful advice. Fiz. v shkole 18 no.4:64-65 J1-Ag '58. (MIRA 11:7)

1. Rudnik Zholybet Akmolinskoy obl. Kaz.SSR, srednyaya shkola (for  
Shaufler). 2. St. laborant kafedry fiziki Permskogo gosudarstvennogo  
universiteta (for Teben'kov).

(Physics)

SHAUFLER, G., arkhitektor

New design for the outdoor illumination of microdistricts. Zhil.  
stroi. no.6:26-27 '62. (MIRA 15:7)  
(Sverdlovsk—Street lighting)

LUBIN, M. J. (1967) ...

... the speed  
of a transonic pulse and the temperature of MS-20 oil.

... no. 845-67 163.

(MIL 87-6)

... ..



PYSHOW, A.M.;SHAUFUS, N.N.

Yield and quality of hops as influenced by the location of the cutting on the bine. Trudy VNIIPP no.5; 59-66 '55. (MLRA 9:1)

(Hops) (Plant propagation)

PYZHOV , A.M.;SHAUFUS, N.N.

Effect of peat crumbs on hop yield and quality. Trudy VNIIPP  
no.5: 67-70 '55. (MLRA 9:1)

(Hops) (Peat)

С. А. Ш. У. У. У. У. У. У.

PYZHOV, A.M.:SHAUFUS, N. N.

Study of pruning periods of parent hop stock in relation to  
variety. Trudy VNIIPP no.5: 84-92 '55. (MLRA 9:1)

(Hops) (Pruning)

PHASE I BOOK EXPLOITATION

PHASE I BOOK EXPLOITATION 760

Promyshlennost' Kazakhstana za 40 let; sbornik statey (The Industry of Kazakhstan During the Last Forty Years; Collection of Articles) Alma-Ata, Kazgosizdat, 1957. 150 p. 13,000 copies printed.

Gen. Eds.: Brover, I.M., Professor and Yerofeyev, N.A., Docent;  
Eds.: Spivak, F.L. and Il'yashenko, L.V.; Tech. Ed.:  
Zlobin, M.V.

PURPOSE: This is a popular book for the general reader.

COVERAGE: This collection of articles, compiled by 12 contributors, relates the story of industrial Kazakhstan under Soviet rule. The introductory chapter surveys the Kazakh economy in its entirety, whereas the other chapters deal with individual industries. The book contains data and figures on almost every aspect of Kazakh industrial endeavor. There are 14 photographs, 1 map, 26 tables, and 5 diagrams. No personalities are mentioned and there are no references.

Card 1/6

The Industry of Kazakhstan (Cont.)

760

TABLE OF CONTENTS:

Neyshtadt, S.A., Doctor of Economic Sciences. A General  
Outline of Industrial Development in the Kazakh SSR 3

During the Sixth Five Year Plan, Kazakhstan plans to increase the production of electricity 2.3 times, rolled stock - 2.1 times, black copper - 1.9 times, lead - 1.4 times, coal - 1.6 times, petroleum - 1.4 times and fertilizers - 8.8 times. A number of shortcomings are pointed out: many important construction schemes are behind schedule; the production of light, household, and textile goods is inadequate; the 1956 plan for copper, zinc, lead, and coal was not fulfilled; planning is not coordinated, and goods produced in Kazakhstan and needed by local enterprises are shipped elsewhere. Several examples are given.

Mil'gram, M.G., Candidate of Technical Sciences. The Mining  
and Metallurgical Industries 23

This chapter mainly reviews the Kazakh nonferrous metal industries and the expanding iron-mining industry.

Card 2/6

The Industry of Kazakhstan (Cont.)

760

Kazakhstan occupies the first place in the world in vanadium and chrome iron ore reserves. However, the location of vanadium ore deposits is not given. Furthermore, the data on molybdenum are confusing. The chapter gives figures on the planned Karaganda Iron and Steel Combine.

Kozhakhmetov, K., Yesenov, M., and Shaukenbayev, T. (Candidate of Economic Sciences). The Kazakh Coal Industry

37

The description of coal deposits is limited to the fields of Karaganda. Ekibastuz coal is being used by power plants. The authors give some data on equipment used. Future plans are discussed at some length.

Kozhakhmetov, Kh., Yesenov, M., and Shaukenbayev, T. The Kazakh Petroleum Industry

56

The article contains data on total oil reserves, but production figures are outdated. The problem of refining is treated superficially.

Card 3/6

The Industry of Kazakhstan (Cont.)

760

Kozhakhmetov, Kh., Yesenov, M., and Shaukenbayev, T. The Kazakh Power Industry

64

The article uses practical examples to demonstrate the advantages of hydroelectric power over thermal electric power. The existing power projects are listed, although data on them are outdated. Information on power grids and power lines is available.

Sklyarov, P.P. The Kazakh Machinery Industry

71

The article gives specifications of drawing mills made at the Alma-Ata Heavy Machinery Works (AZTM). Ten other enterprises are mentioned together with some of their products; another 10 plants are listed as being under construction or planned.

Bekturov, A.B., Academician, and Suvorov, B.V., Candidate of Technical Sciences. The Kazakh Chemical Industry

80

The article lists a number of chemical enterprises, mainly plants producing fertilizers, and discusses some of their problems. Other items discussed are potash salt, borates, and synthetic rubber.

Card 4/6

The industry in Kazakhstan (1981.)

700

Chugay, A.M., Candidate of Economic Sciences. Construction and the Production of Building Materials in the Kazakh SSR  
The building materials industry is still not fully developed and the Republic relies heavily on imports, especially the import of cement. Projects are discussed to solve some of these problems.

Lavrova, I.V., Candidate of Economic Sciences. The Transportation Network of Kazakhstan

101

This is a very thorough survey of all new and planned railways and highways, and of the water transportation lines. Some turnover data are given in percent.

Yerofeyev, N.A., Candidate of Economic Sciences. Light Industries

117

Absolute figures can be deduced from data given in percentages.

Card 5/6

The Industry of Kazakhstan (Cont.) 700

Ratmanov, B.Ya. The Food-processing Industry 131  
Absolute figures (as of 1955) are given.

Brover, I.M., Professor. Concluding Notes 147  
The article explains the system of economic regions.

AVAILABLE: Library of Congress

Card 6/6

MM/jmr  
11-24-58

SHAUKENBAYEV, Tarbay Shaukenbayevich

[The Ural-Emba oil region] Uralo-Embenskii neftenosnyi raion.  
Alma-Ata, Kazakhskoe gos. izd-vo, 1960. 225 p. (MIRA 14:7)  
(Emba region—Petroleum industry)



PHASE I BOOK EXPLOITATION SOV/3700

Moscow. Dom nauchno-tekhnicheskoy propagandy im. F.Ye. Dzerzhinskogo

Nakatyvaniye zubchatykh koles (Gear Rolling) Moscow, 1958. 35 p.

(Series: Peredovoy opyt proizvodstva. Seriya "Tekhnologiya mashinostroyeniya," vyp. 11, Obrabotka metallov davleniyem) 4,000 copies printed.

Ed.: A.V. Rebel'skiy; Tech. Ed.: R.A. Sukhareva.

PURPOSE: This booklet is intended for qualified workers in the field of gear rolling.

COVERAGE: The two articles in this booklet give data obtained from experiments carried out at the Konotop "Krasnyy metallist" Plant in cooperation with TsNIITMASH (Central Scientific Research Institute of Technology and Machine Building) to improve the process of hot and cold gear rolling. No personalities are mentioned. There are no references.

TABLE OF CONTENTS:

Tret'yakov, A.I. Experience Gained in Rolling Toothed Gears at the Konotop Electromechanical Plant "Krasnyy metallist".  
Card 1/2

3

Gear Rolling

SOV/3700

The author describes two methods for rolling gears and gear-rolling equipment developed and introduced at the "Krasnyy metallist" plant. He also gives specifications for comparison with teeth made by other methods.

Shaukstel', L.S. Increasing the Life of Forming Gears Used for Cold Rolling of Small Module Gears

20

The author discusses the design and manufacturing processes of forming gears and arbors, the selection of material, and the rolling regime. He also gives instructions for operation and for determining the life of forming gears.

AVAILABLE: Library of Congress

Card 2/2

VK/mg  
6-27-60

of A. 1951, p. 10.

Vertebrae - Diseases

Pathogenesis of spondylolysis. Mch. zap. Vt. mosk. med. inst. 2, 1951.

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

USSR/Human and Animal Morphology - The Skeleton.

S

Abs Jour : Ref Zhur Biol., No 5, 1959, 21535

Author : Shaulina, O.Ye.

Inst : Second Moscow Medical Institute

Title : Age Changes in the Vertebral Column

Orig Pub : Uch. zap. 2-y Mosk. med. in-t, 1957, 4, 157-160

Abstract : A study was made of the vertebral column of 217 human embryos and fetuses 5-55 centimeters in length. The author introduces the concept "condensation section", which later is converted into an ossification islet. Ossification of the vertebral bodies begins in the thoracic section, spreading upward and downward. The condensation sections appear in the 3rd-4th month of intrauterine life. The appearance of condensation sections in the arches and bodies of the vertebrae

Card 1/2

- 20 -

USSR/Human and Animal Morphology - The Skeleton.

5

Abs Jour : Ref Zhur Biol., No 5, 1959, 21535

occurs simultaneously in the lower thoracic and lumbar areas. Beginning with the 5th month; the bodies of the vertebrae assume a characteristic shape for each section of the vertebral column. Certain data are also presented concerning the development of intervertebral ligaments and the vertebral blood supply.

Card 2/2

SHAULOV, I.

SHAULOV, I.; IANEV, N.

Two microreactions in serodiagnosis of syphilis, Shirvind and Mandula methods. Suvrem. med., Sofia 5 no.1:88-92 1954.

1. Iz Instituta po mikrobiologija (direktor: prof. K.Ianov) i Klinikata po kozhni i venericheski bolesti (direktor: dots. B.Buchvarov) pri meditsinskata akademija I.P.Pavlov, Plovdiv.  
(SYPHILLIS, diagnosis,  
\*serodiag., Shirvind & Mandula technics)

SHAULOV, I.

Luminescent diagnosis of mycotic diseases. Suvrem.med. Sofia  
no.6:76-78 '55.

1. Iz Klinikata za kozhni i venericheski bolesti pri Visshia  
meditsinski institut. I.P. Pavlov-Polvidiv (zav.katedrata:  
prof. B. Buchvarov)

(FUNGUS DISEASES, diagnosis,  
luminescent technic)

SHAULOV, I.

Favus of animal origin; report of (four cases caused by Achorion quinckeanum.) Suvrem. med., Sofia 8 no.6:96-102 1957.

1. Iz Klinikata po kozhni i venericheski bolesti pri VMI I. P. Pavlov; Plovdiv (Zav. katedrata: prof. B. Buchvarov).

(RINGWORM, case reports,

favus caused by Achorion quinckeanum (Bul))

PEYCHEV, P. (Plovdiv, Bolgariya); STOYCHEV, I. (Plovdiv, Bolgariya);  
TOREVA, D. (Plovdiv, Bolgariya); SHAULOV, I. (Plovdiv,  
Bolgariya); YORISH, N.P. (Moskva)

Milk for queen bees. Priroda 53 no.5:115-116 '64.  
(MIRA 17:5)



SHAULOV, YU. KH.

USSR.

Heats of evaporation of nonvolatile compounds. A. I. Solovskii and Yu. Kh. Shaulov. *Trudy Inst. Fiz. i Khim. Akad. Nauk Azerbaidzhan. S.S.R., Ser. Fiz.* 1983, No. 6, 88-92; *Referat. Zhur., Khim.* 1984, No. 23548. Cf. preceding abstr. M. Hosh

PH

①

SHAULOV, Yu. Kh.

USSR/Chemistry - Combustion Kinetics Nov 53

"Thermodynamic Calculations of the State of Products of Combustion in an Enclosed Space." A. I. Rozlovskiy, Yu. Kh. Shaulov, Inst of Phys and Math, Acad Sci Az SSR

Zhur Fiz Khim, Vol 27, No 11, pp 1610-1616

Propose method for calcm of the equil state of products of combustion in an enclosed space on the basis of the partial pressures of components is proposed. This method is preferable to that of Lewis and Elbe because of its relative simplicity and uniformity of mathematical calcns. The new

274T16

method has been applied to problems of the detn of the heat effect of one of the disocn reactions and of the heat capacities of one of the components of a dissocd mixt. A method for calcg the correction for the explosion pressure on the basis of the temp gradient in the explosion vessel is described.

SHAULOV, Yukhanay Khaimovich; ROZLOVSKIY, A.I., redaktor; PEVZNER, M.  
tekhnicheskii redaktor.

[Flame propagation through porous media] Rasprostranenie plameni  
cherez poristye sredy. Baku, Izd-vo Akad. nauk Azerbaidzhanskoi  
SSR, 1954. 94 p. (MLA 8:7)  
(Flame)

SOV/124-58-1-219

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 1, p 23 (USSR)

AUTHORS: Gurvich, A. M., Shaulov, Yu. Kh.

TITLE: How to Account for the Temperature Gradient in the Combustion Products in Explosion Calculations for Spherical Pressure Vessels  
(O metodakh ucheta temperaturnogo gradiyenta v produktakh sgoraniya pri raschete vzryva v zamknutom sfericheskom sosude)

PERIODICAL: Izv. AN AzerbSSR, 1954, Nr 4, pp 3-15

ABSTRACT: It has been established experimentally that in thermodynamic investigations carried out by means of a centrally ignited explosion in a spherical pressure vessel (bomb) the temperature at the center of the bomb, at the time at which the pressure peak is achieved, exceeds the temperature of the gases adjacent to the wall of the vessel by several hundreds of degrees [Centigrade; Transl. Note]. It is well known that in the presence of a temperature gradient the maximal explosion pressure is lower than that which would have prevailed had the temperature distribution been uniform. Calculations show that the temperature-gradient correction to be applied to the maximal pressure rarely exceeds 1% at low temperatures, but that

Card 1/2

SOV/124-58-1-219

How to Account for the Temperature Gradient (cont.)

it depends greatly on the composition of the initial mixture. The paper examines calculation methods for this correction and for the temperature distribution as functions of the radius of the bomb. The volume of the bomb is imagined to be subdivided into a number of thin spherical [ gas ] shells that are concentric with respect to the ignition point. The parameters of state of the combustion products in each shell are calculated under the premise that: 1) The pressure rise in the bomb is proportional to the mass of the combusted mixture; 2) the compression of the as yet uncombusted elemental spherical shells is adiabatic; 3) their combustion proceeds at a constant pressure, without heat losses, and with the establishment of full chemical equilibrium in the combustion products and full energy-distribution equilibrium according to the existing degrees of freedom; 4) the successive compression of the spherical shells up to the maximal explosion pressure proceeds adiabatically. A simplified calculation method is also adduced. A calculation example is provided. Bibliography: 12 references.

V. S. Kutlyarov

Card 2/2

ШАУЛОВ, Ю. Кн.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 22 - 19/45

Authors : Aliev, A. A.; Rozlovskiy, A. I.; and Shaulov, Yu. Kh.

Title : Normal rates of flame of acetylene-oxygen mixtures

Periodical : Dok. AN SSSR 99/4, 559-562, Dec 1, 1954

Abstract . The rate of flame in acetylene-oxygen mixtures was measured at 25°C, an initial pressure of 1 atm and the propagation of the spherical flame in a rigid bomb (cylinder) was photographed on a rotating film. The initial combustion phase, which takes place at a practically constant pressure, was used as a basis for measuring the rate of flame. The results obtained are presented in graphical form. Eleven references: 7-USSR; 2-USA; 1-German and 1-English (1910-1951). Graphs.

Institution : Academy of Sciences Az-SSR, Institute of Physics and Mathematics

Presented by: Academician A. N. Frumkin, October 8, 1954

"Thermodynamic Investigations by the Explosion Method and the Calculation of Combustion Processes," by A. M. Gurvich and Yu. Shaulov, Publishing House of Moscow State University, 1955, 165 pp (from Referativnyy Zhurnal -- Mekhanika, No 1, Jan 57, Abstract No 219 K, by V. V. Smirnov)

"This book describes procedures for the determination of thermodynamic values by the method of explosion in a closed vessel and also for the measurement of the maximum pressure produced by explosions as well as for the calculation of the chemical equilibrium both in the case of combustion at constant volume and in the case of combustion at constant pressure.

"Chapter 1 expounds the general principles underlying measurements of thermodynamic values by the explosion method.

"Chapter 2 describes an experimental installation for the determination of the maximum explosion pressure as well as the principle of operation and design of various pressure indicators used in investigations of this type.

84M-1517

ANALYSIS  
"Chapter 3 describes the physical aspects of phenomena which occur in a bomb during an explosion. A fundamental proposition on which further calculations are based is analyzed, namely, the assumption that combustion leads to the establishment of a chemical equilibrium behind the reaction zone in a mixture of combustible products. Possible explanations are given for deviations of experimentally found values of the maximum explosion pressure from values calculated on the basis of independently determined thermodynamic constants. Furthermore, different causes of the loss of heat during explosions and the effect of these losses on the results of the determinations are considered.

"Chapter 4 outlines general considerations pertaining to the calculation of the chemical equilibrium in a system of reacting ideal gases at constant volume and a constant pressure. The equation of the heat balance is formulated for the case of the reaction at constant volume, both with consideration of dissociation and without considering it. It is noted that in the case of the reaction at constant pressure the temperature of combustion will be lower and the calculation more complicated.

"Chapters 5 and 6 describe methods for the calculation of combustion processes at constant volume and at constant pressure. Equations expressing the chemical equilibrium and the material balance are given. Various schemes are given for the solution of equations pertaining to these systems by the method of selection of one of the partial pressures. A method for the calculation of the maximum temperature of explosions is described as well for the computation of the maximum pressure in the case of combustion at constant volume or of the maximum degree of expansion in the case of combustion at constant pressure.

6.10.1574

HA-0174.  
"Chapter 7 describes an approximate method of conducting calculations for combustion processes at constant pressure on the basis of work described by Ya. V. Zel'dovich and A. I. Polyarnyy in Raschety Teplovykh Protsesov pri Vysokoy Temperature (Calculation of Thermal Processes at High Temperatures), Byuro Novoy Tekhniki (The Bureau of New Technology), Moscow, 1947.

"Chapter 8 discusses the solution of systems of equations used in combustion calculations, i. e., the method of the selection of values of several unknowns, the method of successive approximations, and the method of reducing the system of equations to a linear one when the approximate values of the unknowns are available. The limits within which the different methods can be applied are subjected to consideration.

"Chapter 9 outlines schemes of calculations to be carried out in the determination by the explosion method of the average heat capacity and of the heats of dissociation as well as methods of introducing corrections for an inhomogeneous temperature distribution in the combustion products.

"All calculation methods are illustrated by numerical examples.

"Appendixes to the book give fundamental information on statistical thermodynamics. Statistical methods for the calculation of thermodynamic quantities are described. Furthermore, methods for the calculation of the entropy of mixtures of combustion products are given. An example of a calculation of this type serves to illustrate the text. Tables of some values required for thermodynamic calculations are appended. A bibliography comprising 63 references follows the text of the book." (U)

GURVICH, A.M.; SHAULOV, Yu.Kh.

Methods of accounting for temperature gradient of combustion products in calculating an explosion in a sealed spherical vessel.  
Izv. AN Azerb. SSR no.4:3-15 Ap '55. (MIRA 8:6)  
(Combustion) (Thermodynamics)

SHAULOV, Yu. Kh.

9

Phys

✓ The determination of thermodynamic characteristics by the measurement of explosion pressure in a closed volume. I. G. Kerimov, A. I. Rogloyskii, and Yu. Kh. Shaulov. *Trudy Inst. Fiz. i Mat., Akad. Nauk Azerbaidzhan S. S. R., Ser. Fiz.* 7, 41-9 (1955).—Mixts. of  $H_2$  and  $O_2$  were exploded in various ratios in the presence of either  $N_2$  or  $Ar$  also in the presence of  $N_2 + He$ . The pressures measured were used in a graphic method to obtain the heat contents of  $H_2O$  vapor at various temps., also the amts. of free atoms of  $O$  and  $H$  and the radical  $OH$  produced at 2200, 2400, and 2600°K. The dissocn. heat was 126.00 kcal./mole at 0°K. for the reaction  $2H_2O = H_2 + 2OH$ . Werner Jacobson

3

RM MT *[signature]*

Shaulov, Yu. Kh.

✓ A simplified calculation method of the temperature distribution and the pressure correction of the temperature gradient for the products of an adiabatic explosion of a gas mixture in a closed vessel. A. M. Gurvich and Yu. Kh. Shaulov. *Trudy Inst. Fiz. i Mat., Akad. Nauk SSSR*, Ser. Fis. 7, 77-97 (1955). The expts. and the calcs. based upon them refer to explosion of mixts. of H and O in various ratios, in the presence of various amts. of He. In the 1st step the max. explosion pressure is calcd. on the assumption of equil. distribution of the temp. in the combustion products. Then the starting condition for the calcn. of the pressure correction of the temp. gradient is fixed. Next follows a calcn. of the state of the combustion products in an elementary spherical layer (this is a 3-step process). By numerical examples it is shown that this method of calcn. leads to satisfactory results, which do not differ much from the strict way of calcn., i.e. the results are correct for a nonequil. distribution of the temp., if the expts. are run in a spherical vessel where the ignition occurs centrally (usual type of bomb). Formulas are also derived for the calcn. of the temp. distribution in the products of an adiabatic explosion as a function of the bomb radius.

Werner Jacobson

46

Handwritten mark

Handwritten signature

Shaulov, Yu. Kh.

SOV/24-57-5-5293

Translation from: Referativny zhurnal. Mekhanika, 1957, Nr 5, p 27 (USSR)  
AUTHORS: Karasheily, K. A., Kerimov, I. G., Nasirov, Ya. N., Rozlovskiy, A. I.,  
Shaulov, Yu. Kh.

TITLE: On the Conditions Conducive to the Inception of Instability of Normal  
Combustion (K voprosu ob usloviyakh vozniknoveniya neustoychivosti normal'nogo goreniya)

PERIODICAL: Dokl. AN A.S.S.R., Vol 11, Nr 12, pp 819-823

ABSTRACT: An experimental investigation of flame propagation in methane-oxygen  
and acetylene-oxygen mixtures aimed at an evaluation of the lower  
boundary of Reynolds numbers at which the transition zone from nor-  
mal detonational combustion begins. The experiments were made  
in transparent rubber balloons up to 20 liters in volume. No detona-  
tion was observed during the combustion of the methane-oxygen mix-  
tures; the beginning of flame acceleration corresponds to Reynolds  
numbers of the order of  $4 \times 10^4$ . Bibliography: 5 references.  
B. V. Raushenskikh

Card 1/1

Shaulov, Yu. Kh.

The determination of the characteristic thermodynamic data from pressure measurements of explosions in a closed space. I. G. Kerimov, A. I. Rozloyskii, and Yu. Kh. Shaulov (Phys. and Math. Inst., Acad. Sci. Azerbaijan S.S.R., Baku). *Zhur. Fiz. Khim.* 29, 1001-6 (1955).—The principles of the method of calcg. the state of the explosion products, and of the thermodynamic characteristics of one component of a suitably selected combustible mixt. exploded in a rigid bomb were shown in the previous paper (Rozloyskii and Shaulov, *C.A.* 49, 5100g). In the present paper, the heat content of steam, and the heat of water dissoen. according to the reaction  $2H_2O = H_2 + 2OH$  were detd., and the latter was found equal to 127.1 kcal./mol. The application of the method of calcn. to the evaluation of the condition of combustion products in a closed space is illustrated on numerical examples. W. M. Sternberg

31

APP  
0000

SP LFM

Shanlov, Yu. Kh.

Chem

Two-flame combustion of nitrogen dioxide-hydrogen mixture. Ya. N. Nasirov and Yu. Kh. Shanlov. *Doklady Akad. Nauk S.S.S.R.* 108, 888-70 (1956). The NO<sub>2</sub>-H<sub>2</sub> flame in a spherical flask with central ignition was photographed on a rotating film during combustion by the method described by Rozlovskii (C.A. 50, 16303k). The photographs showed a 2-flame combustion process sep'd. by a time interval  $t$  (induction period) on the order of several thousandths of a sec. The explanation was advanced that NO<sub>2</sub> is reduced in the 1st flame, and the 2nd combustion of the total process proceeds adiabatically by the Mache effect (*Die Physik der Verbrennungsvorgaenge*, 1918) (C.A. 13, 904)). The compn. and conditions of the primary combustion products in the 1st flame are not as yet properly understood and require addnl. study. W. M. Sternberg

2

PM

54-1380

"Engines and Blade Machines," by Yu. Kh. Shaulov, Novyye Knigi  
za Rubezhom, Seriya B. Tekhnika, No 1, Jan 57, pp 84-94 ✓

In a review of Theory of Combustion Instability in Liquid Propellant Rocket Motors by L. Crocco and Sin-I-Cheng, Butterworth, London, 1956, Yu. Kh. Shaulov states that "this monograph is of great interest to engineers and scientific workers engaged in the study of engine operating processes .... In conjunction with the lack of literature dealing with the stability of the combustion process in liquid fueled rocket engines, the publication of this monograph in Russian would be very beneficial."

SHAULOV, YU. KH.

27 27  
 4EB  
 4E4

Combustion of a mixture of nitrogen dioxide and hydrogen in the closed space. Ya. N. Nasirov and Yu. Kh. Shanlov. *Doklady Akad. Nauk Azerbaidzhan. S.S.R.* 13, 376-9 (1957) (Russian summary).—Two successive propagations of flames were observed in the combustion of a mixt. of  $\text{NO}_2 + \text{H}$  with the time interval  $J = 10 \times 10^{-4}$  to  $40 \times 10^{-4}$  sec. The  $J$  depends on the compn. of mixt. and pressure (20–250 mm. Hg). The min. value of  $J$  was observed in the mixt. where the velocity of flame was max. The max. value corresponds to the ratio  $\text{NO}_2/\text{H} \approx 0.70$  but not to the 1.0 as was shown by Wolfhard (cf. *C.A.* 48, 1120g). Displacement of max. to the side of a mixt. rich in H is due probably to the autoinhibition of  $\text{NO}_2$ . The velocity of flame in the mixt. ( $\text{NO}_2/\text{H} = 0.5$ ) can be regarded as directly proportional to the sq. root of the pressure, in the stoichiometric mixt. to the 4th root, and in the mixt. rich in  $\text{NO}_2$  to the 6th even 7th root. The order of the reaction changes with the compn. of mixt. from 2 to 2.3 and can be considered as a 2nd-order reaction. The value of heat of activation is 23 kcal./mol. The preliminary expts. with the mixt. of  $\text{NO}_2$  and  $\text{CH}_4$  showed that in this reaction also takes place two combustion flames. The max. velocity of flame was observed in the mixt.  $\text{NO}_2/\text{CH}_4 = 0.24$ .

M. Charmandarian

M.T.

SHAULOV, Yu.Kh., prof., red.; SHEMANINA, V.N., red.; KLIMENKO, S.V.,  
tokhn. red.

[Liquid and solid pocket fuels; collection of translations]  
Zhidkie i tverdye raketnye topliva; sbornik perevodov. Moskva,  
Izd-vo inostr.lit-ry, 1959. 435 p. (MIRA 12:10)  
(Rockets (Aeronautics)--Fuel)

PHASE I BOOK EXPLOITATION SOV/5813

Shaulov, Yukhanan Khaimovich, and Moisey Ovseyevich Lerner

Goreniye v zhidkostnykh raketnykh dvigatelyakh (Combustion in Liquid-Propellant Rocket Engines) Moscow, Oborongiz, 1961. 194 p. Errata slip inserted. 6500 copies printed.

Ed.: V. V. Korobov, Candidate of Chemical Sciences; Ed. of Publishing House: L. I. Sheynfayn; Tech. Ed.: V. P. Rozhin; Managing Ed.: S. D. Krasil'nikov, Engineer.

PURPOSE : This book is intended for industrial engineers. It may also be useful to students in advanced courses and aspirants in related specialties.

COVERAGE: The book describes the fundamentals of the combustion theory and of the working processes in combustion chambers. Kinetics of chemical reactions in flames, combustion instability, and problems of physical and chemical modeling of processes in liquid propellant rocket engines are also discussed. ~~The authors~~

Card 1/1

OROCHKO, D.I.; SHAULOV, Yu.Kh.

In memory of Andrei Vladimirovich Frost. Zhur.fiz.khim. 37  
no.1:250-251 Ja '63. (MIRA 17:3)

SHAYTOV, Ya.Kh.; TSYBANSKAYA, V.S.; YEVSTERNYANS, Ye.V.; SHNYEVA, G.O.

Determination of the enthalpies of formation of organoaluminum  
compounds. Part 1. Zhur. fiz. Khim. 35 no.9:1779-1783 51 vol.  
(NBSA 18:3)

NA. NAPOV, Yu.D.; SHAULOV, Yu.Kh.

Heats of combustion of ethoxysilanes. Determination of the heat  
of combustion of tri- and tetraethoxysilane. Zhur. fiz. khim.  
38 no.12:2975-2979 B '64. (MIRA 18:2)

M. C. H. A. C. Y. A. S. S. I. N. G. W. R. S.

heat of combustion of tetraethyl lead. All memb. vol. Ser. 112.-  
tech. from. vol. 112-1962 '65. (MIRA 1336)

IMBATOV, B.O.; KUMAYEV, V.N.; JHANELOV, Ya.Nh.

Thermodynamic studies at low temperatures. Izv. AN Azerb. SSR. Ser.  
fiz.-tekh. i mat. nauk no.1:53-55 1-5.

(NIRA 18:6)

L 27837-65 EWT(m)/EPF(c)/EPR/EWP(j)/EWA(h) Pc-4/Pr-4/Ps-4/P1-4/PeB RPL 41  
BW/WW/JW/RM

ACCESSION NR: AP5004354

S/0076/65/039/001/0105/0109 37B

AUTHOR: Shaulov, Yu. Kh. (Moscow); Shmyreva, G. O. (Moscow); Tubyanskaya, V. A. (Moscow)

TITLE: Heat of formation of organoaluminum compounds. II. Heat of formation of triethylaluminum, diisobutylaluminum hydride, and diethylaluminum hydride

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 1, 1965, 105-109

TOPIC TAGS: organoaluminum compound, alkylaluminum, alkylaluminum hydride, heat of combustion, heat of formation.

ABSTRACT: An earlier study of heats of combustion and formation of organoaluminum compounds (Zhurnal fizicheskoy khimii, v. 38, 1964, 1779) was continued by measuring the heats of combustion at constant volume and physical properties of liquid triethylaluminum, diisobutylaluminum hydride and diethylaluminum hydride and by calculating the heats of evaporation and heats of combustion and formation under standard conditions. The specimens were purified by multiple vacuum rectification and their purity was determined by a linear dependence of  $\lg p$  upon  $1/T$ ; for diethylaluminum hydride this linearity was shown to be limited to temperatures above 100C. The specimens were burned in calorimetric bombs at 25 atm initial oxygen pressure and 23.6 or 25C initial temperature. The quantity of carbon dioxide formed

Card 1/2

L 27837-65

ACCESSION NR: AP5004354

4

was 97—100% of theoretical values and x-ray analysis proved that only  $\alpha$ -alumina was formed. Heats of evaporation, and standard heats of combustion and formation were calculated. The latter, not accounting for heats of molecular association, are -51.9, -96.1, and -73.5 kcal/mol for triethylaluminum, diisobutylaluminum hydride, and diethylaluminum hydride, respectively, all values being based on the liquid state. The density and calculated normal boiling point for each compound are also given. "The authors acknowledge the assistance of A. A. Smolyaninova in the experimental work and thank A. F. Popov and N. N. Korneyev for supplying the samples studied." Orig. art. has: 4 tables, 1 figure, and 4 formulas. [08]

ASSOCIATION: none

SUBMITTED: 03Mar64

ENCL: 00

SUB CODE: OC,GC

NO REF SOV: 003

OTHER: 006

ATD PRESS: 3193

Card 2/2

1. The first part of the paper is devoted to the

determination of the rate of formation of some derivatives of  
steroidane series. Dash. massy no. 3.16-18 '63.

(MIRA 18:6)

KAL. NISOV, Yu.M., LEEFY, V.B., SHAPIN, Ya.Kh., MOISEEV, A.F.,  
TUBYANSEYAY, V.S.

Heats of combustion of some nitrogen-containing organoalicyclics.  
Zhur. fiz. khim. 39 no. 9:1220-1223 My '65. (MIRA 12:8)

SHAULOV, Yu.Kh., prof. (Moskva)

Chemistry serves electronics. Priroda 54 no.12:6 D '65.  
(MIRA 18:12)

L 14572-66 EWT(m)/EWP(j)/T WW/JW/JWD/WE/RM

ACC NR: AP6004180

SOURCE CODE: UR/0076/66/040/001/0122/0124

AUTHOR: Shaulov, Yu. Kh.; Shmyreva, G. O.; Tubyanskaya, V. S. 65

ORG: none

TITLE: Heat of combustion of ammonium borane 11, 12, 11, 12

SOURCE: Zhurnal fizicheskoy khimii, v. 40, no. 1, 1966, 122-124 1

TOPIC TAGS: boron compound, borane, ammonium borane, heat of combustion, heat of formation

ABSTRACT: Heat of combustion at constant volume ( $\Delta U$ ) of ammonium borane  $\text{BH}_3\text{NH}_3$  has been determined experimentally and its standard heat of formation  $\Delta H_F^0$  has been calculated. The exact value of  $\Delta H_F^0$  is necessary for solving problems connected with the synthesis of  $\text{BH}_3\text{NH}_3$ .  $\Delta H_F^0$  was calculated from the equation:  $\Delta H_F^0(\text{BH}_3\text{NH}_3(\text{cr})) = \Delta H_F^0(\text{H}_3\text{BO}_3(\text{cr})) + 1.5 \Delta H_F^0(\text{H}_2\text{O}(\text{liq})) - \Delta H_C^0(\text{BH}_3\text{NH}_3(\text{cr}))$ , where  $\Delta H_F^0(\text{H}_3\text{BO}_3(\text{cr}))$  and  $\Delta H_F^0(\text{H}_2\text{O}(\text{liq}))$  are data from the literature, and  $\Delta H_C^0(\text{BH}_3\text{NH}_3(\text{cr}))$  is the standard heat of combustion of  $\text{BH}_3\text{NH}_3$ , which was calculated from the experimental  $\Delta U$ .  $\Delta U$  was determined calorimetrically by burning powdered  $\text{BH}_3\text{NH}_3$  in oxygen under 30 atm at an initial temperature of  $25 \pm 0.001^\circ\text{C}$ . Calorimetric procedure and analysis of combustion products

Card 1/2

UDC: 541.11

L 14572-66

ACC NR: AP6004180

(boric acid and nitrogen) were described. Combustion of powdered  $\text{BH}_3\text{NH}_3$  was 99.5—100% complete and dispersion of data was 0.2%. The average  $\Delta H_C^0(\text{BH}_3\text{NH}_3(\text{cr}))$  was  $-322.4 \pm 0.7$  kcal/mol and the calculated  $\Delta H_F^0(\text{BH}_3\text{NH}_3(\text{cr}))$  was  $-42.54 \pm 1.4$  kcal/mol. Orig. art. has: 1 table and 3 formulas. [JK]

SUB CODE: 07/ SUBM DATE: 26Sep64/ ORIG REF: 003/ OTH REF: 006/  
ATD PRESS: 4190

Card 2/2 <sup>FW</sup>

SHAJLOV, Yu.Kh.; SHMYREVA, G.O.; TUBYANSKAYA, V.S. (Moskva)

Heats of formation of organoaluminum compounds. Part. 2.  
Zhur. fiz. khim. 39 no. 1:105-109 Ja '65 (MIRA 19:1)

1. Submitted March 3, 1964.

L 16383-65 EWT(m)/EPF(c)/T Pr-L RAEM(c)/ESD(gs)/ESD(t)/AFWL/ASD(a)-5/AS(mp)-2/  
ACCESSION NR: AP4043283 AFETR DJ S/0065/64/000/008/0058/0060

AUTHOR: Dudin, V. F.; Shaulov, Zh. I.; Khadzhiyev, S. N.

TITLE: The possibility of investigating the kinetics of oil solidification by the ultrasonic method B

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 8, 1964, 58-60

TOPIC TAGS: ultrasonics, ultrasonic testing oil solidification, kinetics, crystallization, crystal growth

ABSTRACT: The possibility of using the ultrasonic method to analyse the kinetics of oil solidification (where solid phase separates and then the crystals consolidate imparting solid material or anomalous viscous liquid properties to the oil) was investigated. The ultrasonics impulse amplitude-temperature relationship for MS-20 oil was determined using a PIK-7 impulse apparatus with a barium titanate piezo pickup and a double beam oscillograph DESO-1. As the oil was cooled from 10 to -12C its viscosity and coefficient of sound absorption increased

Card 1/2

L 16383-65  
ACCESSION NR: AP4043283

while the amplitude of the ultrasonics impulse decreased and the solubility of the solid hydrocarbons decreased until they started to crystallize. There was no significant change of amplitude near the solidification temperature indicating no increase in the number of crystallization centers and no significant change in the viscosity of the intercrystalline liquid; only the size of the crystals increased. Further cooling lowered the viscosity of the intercrystalline liquid. The absence of significant changes in absorption is assumed to indicate that no new crystallization centers were formed--that the other types of hydrocarbons crystallized onto the first crystals. Orig. art. has: 1 figure.

ASSOCIATION: GNI

SUBMITTED: 00

ENCL: 00

SUB CODE: GP, GC

NO REF SOV: 011

OTHER: 001

Card2/2

SHAUMAN, A.M.

Selection of an interference-free mode. Vych. tekhn. i vop.  
prog. no. 203-15 '63. (MIRA 17:8)

SHAUMAN, A.M.; BEREZNAYA, I.Ya.; FUDKOV, G.Ya.; CHIRKOV, M.K.

Display systems using digital glow-discharge tubes. Vych.  
tekh. i vop. prog. no.2:79-88 '63. (MIRA 17:8)

REVENKO, V.S.; GRIGOR'EV, G.I.; LIFSHAN, I.M.

Certain possibility for visual data registration using a  
digital computer. Vych. bezl. i vop. prog. no.2:97-104 '63.  
(MIRA 17:8)

PODOL'SKIY, V.I.; CHADYAN, G.A., doktor tekhn.nauk

Reviews and bibliography. Mekh. i avtom. proizvod. 18 no.12:51-52  
D '64. (MIRA 18:3)

1. Zamestitel' glavnogo bukhgaltera po mekhanizatsii upravlencheskogo  
truda 2-go Moskovskogo chasovogo zavoda (for Podol'skiy).

Ильин, А.А., доктор техн.наук

Reviews and bibliography. Mashinostroitel' no.1:4. Ja '65.

(MIRA 18:3)

SHAUL'SKIY, A. S.

Kak ia obuchaiu shtukaturov (How I teach plasterers), Lit. zapis' A. M. Shepeleva.  
Moskva, Trudrezervizdat, 1953. 80 p. (Peredovye metody truda. Rasskazy novatorov)

SO: Monthly List of Russian Accessions, Vol. 7, No. 6, Sep. 1954

ШАУЛСКИЙ, М.С.

LOMUNOV, K.

Book on the experience of an innovator ("How I teach plasterers."  
A.S.Shaul'skii. Reviewed by K.Lomunov). Prof.-tekh.obr. 11 no.3:  
30 '54. (MLRA 7:8)

1. Rukovoditel' seksii shtukaturov Instituta novatorov-stroite-  
ley pri Gor'kovskom inzhenerno-stroitel'nom institute imeni V.P.  
Chkalova.  
(Plasterers)

SHAUL'SKIY, A.S.

Compressionless sprayer for plastering. [suggested by A.S. Shaul'ski].  
Rats. i izobr. predl. v stroi. no. 4:66-68 '57. (MIRA 11:8)  
(Plastering)

SHAUL'SHII, F. I.

Zheleznodorozhnye uzly v planirovke gorodov. (Railroad junctions in city planning).  
(Izvestiia Otdeleniia tekhnicheskikh nauk AN SSSR, no. 10, 1940).

DLC: AS262.A6244

S: Soviet Transportation and Communications, A Bibliography, Library of Congress,  
Reference Department, Washington, 1952, Unclassified.

SHAUL'SKIY, F. I. (Pocent) Dr. Tech. Sci.

Dissertation: "Transport Junctions, Their Complex Planning and New Types of Unified Stations for Various Kinds of Transport." Moscow Order of Lenin Inst. of Railroad Engineers, imeni I. V. Stalin, 5 Mar 47.

SO: Vechernyaya Moskva, Mar, 1947 (Project #17836)

SHANLISKII, F. I. and VIADIMIR NIKOLAEVICH ORANTSCHIK.

Vodnyi, vovdushnyi, avtodorozhnyi, gorodskoi i promyshlennyi transport.  
Utverzhdeno v kachestve uchebnika dlia vtuzov zh.-d. transporta. Moskva,  
Transzheldorizdat, 1948. 490 p., illus.

Bibliography: p. 485-487.

Air Transportation: p. 107-108.

Title tr.: Water, air, highway, urban and industrial transportation.  
Approved as a textbook for schools of advanced studies in transportation.

HE255.C22

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of  
Congress, 1955.

SHAUL'SKIY, F. I.

Obraztsov, V. I., Marek, D. P., Nadezhin, S. P., Skovich, V. A. and  
Shaul'skiy, F. I., "Importance of a Unified Technological Process in Railroad  
Transportation and Method of Procedure." Edited dby Academician V. N. Obraztsov,  
Academy of Sciences USSR. (Section on Scientific Solution of Transportation Prob-  
lems, Academy of Sciences USSR, 1949, 160 pp, 1,500 copies.

USSR/Academy of Sciences  
Scientists

Jun 49

"V. N. Obraztsov (on His Seventy-Fifth Birth-  
day)," Acad G. P. Perederiy, F. I. Shaul'skiy, 4 pp

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 6

V. N. Obraztsov, twice Laureate of the Stalin Prize, is an outstanding transportation engineer. Obraztsov aided in working out transport problems connected with reconstruction and planning of Moscow, Stalingrad, Magnitogorsk, Baku, Sverdlovsk, Rostov/Don, Tashkent, and other cities. In 1939 he was chosen an active member of the Academy, where he heads the Sec on Sci Sol of Transport Problems.

FDD

52/49T9

SHUL'KIN, A. I.

"Basic Premises in the Classification of Railways of the USSR," Izv. Akad. Nauk SSSR, Otdel. Tekh. Nauk, No. 4, 1979. "Loris Nikolayevich Vedemsov," *ibid.*, No. 5, 1979; (Obraztsov, V. A.; -.)

USSR/Academy of Sciences - Book, Mining

Jul 50

"Review of Book, 'Essence of the Unit Technological Process in Railroad Transportation and Its Procedure and Execution,'" P. P. Sadikov

"Iz Ak Nauk SSSR, Otdel Tekh Nauk" No 7, pp 1099-1101

Reviews subject book by Acad V. N. Obratsov, D. P. Marek, S. P. Nadezhin, V. A. Sokovich, and P. I. Shaul'skiy. States more than 80% of all freight is carried by trains.

162T2

SHAUL'SKIY, F.I., otvetstv. redaktor.

[Overland lumber transportation] Sukhoputnyi transport lesa.  
Moskva, Goslesbumizdat, 1951. 818 p. (MLRA 7:11)  
(Lumber--Transportation)

OBRAZTSOV, V.N., 1874-1949; SHAUL'SKIY, F.I., doktor tekhnicheskikh nauk, professor; ZEMBLINOV, S.V., doktor tekhnicheskikh nauk, professor; SOSKOVICH, V.A., doktor tekhnicheskikh nauk, professor; [deceased]; NIKITIN, V.D., doktor tekhnicheskikh nauk, professor; KOCHNEV, F.P., doktor tekhnicheskikh nauk, professor; TIKHOMIROV, N.M.; CHVANOV, V.G., redaktor; ZELENKOVA, Ye.G., tekhnicheskiiy redaktor

[Selected works] Izbrannye trudy. Moskva, Izd-vo Akademii nauk  
SSSR. Vol.1. 1955. 444 p. (MLRA 9:1)

(Railroads) (Transportation)

SHAUL'SKIY, F.I., prof., doktor tekhn.nauk; POLYAKOV, A.A., kand.  
tekhn.nauk

Over-all planning for the development of transportation  
terminals. Trudy MIIT no.105:4-33 '58. (MIRA 11:9)  
(Railroads--Yards)

SHAUL'SKIY, F.I., prof., doktor tekhn.nauk; LIVSHITS, R.M., kand.tekhn.  
nauk; SOLOGUB, N.K., kand.tekhn.nauk

Calculation of work volume and expenses in lengthening of  
station tracks. Zhel.dor.transp. 41 no.11:52-54 N '59.

(MIRA 13:2)

(Railroads--Cost of construction)

KARPENKO, A.I. [deceased]. Prinimali uchastiye: SLIVKIN, A.Sh., prepodavatel'; RYVIN, V.Ys., prepodavatel'. SHAUL'SKIY, F.I., prof., retsenzent; KOSTIN, I.I., kand.tekhn.nauk, retsenzent; KUZNETSOVA, A., prepodavatel', retsenzent; GNEZDILOV, V.B., red.; LANOVSKAYA, M.R., red.izd-va; KLEYNMAN, M.R., tekhn.red.

[Railroad stations of metallurgical plants] Zheleznodorozhnye stantsii metallurgicheskikh predpriyatii. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1960.  
211 p. (MIRA 14:3)

1. Leningradskiy tekhnikum promyshlennogo transporta (for Slivkin, Ryvin). 2. Denpropetrovskiy industrial'nyy tekhnikum (for Kuznetsova).  
(Railroads, Industrial)