

SHAYEVICH, A.B.

Methods for the investigation of standards used in spectrum analysis.
Zav.lab. 21 no.3:332-336 '55. (MLRA 8:6)

1. Laboratoriya standartnykh obraztsov pri Ural'skom institute chernykh metallov.
(Spectrum analysis)

SHAYEVICH, A-B.

✓ The effect of the form of the compound of elements on the spectrographic analysis of their solutions by means of an excited spark. A. B. Shayevich. *Zavodskaya Lab.* 21, 1089-94 (1955).—The abs. blackening intensity, S , of the nitrate chlorides, and sulfates of Cr, Mn, Ni, and of the internal standard Fe, detd. by a modified Dmitriev method (cf. C.A. 43, 53254), was different; the values of S for the salts of Fe were: 1.083, 0.840, 0.885 for the line 2577.9A.; 1.159, 1.064, 0.982 for the line 2834.1A.; and 0.618, 0.534, 0.570 for the line 3413.1A. The calibration curve ΔS vs. $\log C$ deviated most for the sulfates and was greater than the exptl. error. Detns. were made with solns. of the salts contg. 5 and 15% of the other free acids: nitrates contg. HCl and H_2SO_4 , etc. The shift in the calibration curves occurred primarily in the presence of free H_2SO_4 (up to 35% error). Substitution of satd. C for satd. filter paper gave the same results. To det. the effect of the spark temp., 3 groups of solns. of Mn salts were carried out comparing the Mn line 2949.2 with the Fe lines 2938.9, 2928.6, and 2944.4A. Even with such pairs as Mn 2949.2-Fe 2928.6A. with similar ionization potentials, 5.37 and 5.22, complete merging of the curves for the detn. of Mn nitrate and sulfate was not observed, whereas the curves of the nitrates and the chlorides did not coincide for any of the pairs. This was ascribed to the greater volatility of the chlorides. I. B.

Phys Chem

AM

SHAYEVICH, A.B.; SKOBLINA, N.M.

Spectral analysis of carbon, silicon, and phosphorus in ferromanganese. Zav.lab.22 no.2:195-196 F'56.(MLRA 9:6)

1.Laboratoriya standartnykh obraztsov pri Ural'skom institute chernykh metallov.
(Ferromanganese--Spectra)

137-58-6-13900

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 385 (USSR)

AUTHORS: Shayevich, A.B., Kobyakova, E.V., Men'shikova, Z.P.,
Prosfakov, M.Ye.

TITLE: Spectrometric Analysis for Iron, Tin, and Zinc in the Flux of
Tin-plating Equipment (Spektral'nyy analiz flyusa ludil'nykh
apparatov na zhelezo, olovo i tsink)

PERIODICAL: Byul. nauchno-tekhn. inform. Ural'skiy n.-i. in-t chernykh
metallov, 1957, Nr 3, pp 169-172

ABSTRACT: A weighed portion is dissolved in HCl. The introduction of
the dissolved matter into the discharge zone is accomplished by
burning an ash-free filter paper impregnated with the solution
being analyzed. A description of the device by means of which
this incineration is performed is given. Photography is made
by the ISP-22 spectrograph with an exposure of 50 sec; spectra
are produced by an A-C arc, with a current of 6 amp. Analyt-
ical pairs of lines are: Sn 2661.25 - Zn 2756.45, Fe 2730.55 -
Zn 2756.45. The mean-square error of three determinations is
~5%. A comparative table of the results of spectrographic and chem- A.Sh.
ical analyses of the fluxes is adduced. 1. Iron--Determination 2. Tin
--Determination 3. Zinc--Determination 4. Spectrographic analysis--Appli-
cations

Card 1/1

SHAEVICH, A. B.

3656. Spectrographic analysis of siliconmanganese
 A. B. Shaevich and M. A. Perepelkina (Lab. of
 Standard Samples, Ural Inst. of Ferrous Metals).
 Zavod. Lab., 1957, 28 (5), 556-558. The powdered
 sample mixed with graphite and CuO (1 + 20 + 20)
 is excited in the arc discharge on a moving disc
 electrode and the lines Si 2532-28, Mn 2533-06 and
 Fe 2535-60 Å are measured. Calibration graphs are
 constructed with the co-ordinates

$$\left[\Delta S_{Si-Mn} ; \log \frac{C_{Si}}{C_{Mn}} \right]$$
 and $\left[\Delta S_{Fe-Mn} ; \log \frac{C_{Fe}}{C_{Mn}} \right]$,
 and the contents of Si ($\approx 20\%$) and Mn ($\approx 70\%$)
 can be determined with an error of 1% of the
 sample wt.
 G. S. SMITH

6
7 etc

PMJ
Jua
JMB

24(7)

PLEASE I BOOK EXPLOITATION

307/1700

L'vov, Universitet

Materialy I Vsesoyuznogo soveshaniya po spektroskopii, 1956. t. II: Atomnaya spektroskopiya (Materials of the 10th All-Union Conference on Spectroscopy, 1956, Vol. 2: Atomic Spectroscopy) / Kiev: Izd-vo L'vovskogo univ., 1958. 568 p. (Series: Iza. Fizicheskii sbornik, v. 79, 4(9)) 3,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po spektroskopii.

Editorial Board: G.S. Landsberg, Academician, (Resp. Ed.); I.A. Pablinitskiy, Doctor of Physical and Mathematical Sciences; V.G. Komitskiy, Doctor of Physical and Mathematical Sciences; V.G. Komitskiy, Candidate of Technical Sciences; S.M. Raymskiy, Candidate of Physical and Technical Sciences; L.K. Klimovskaya, Candidate of Physical and Mathematical Sciences; V.S. Milyuzhuk (Pseud.), Doctor of Physical and Mathematical Sciences; A.Ye. Glauberman, Doctor of Physical and Mathematical Sciences; Ed. S.L. Gazer; Tech. Ed.: T.V. Saranyuk.

FUNPOSE: This book is intended for scientists and researchers in the field of spectroscopy, as well as for technical personnel using spectrum analysis in various industries.

COVERAGE: This volume contains 177 scientific and technical studies of atomic spectroscopy presented at the 10th All-Union Conference on Spectroscopy in 1956. The studies were carried out by members of scientific and technical institutes including 120 and extensive bibliographies of Soviet and other sources. The studies cover many phases of spectroscopy: methods for controlling electromagnetic radiation, physicochemistry of rare earths, uranium production, physicochemistry of gas discharge, optics and spectroscopy, thermal dispersion in metal vapors, spectroscopy and the combustion theory, spectrum analysis of ores and alloys, photographic methods for quantitative spectrum analysis of metals and alloys, spectral determination of the hydrogen content of metals by means of isotopes, tables, and atlases of spectral lines, spark spectrographic analysis, statistical study of variation in the parameters of calibration curves, determination of traces of metals, spectrum analysis in metallurgy, thermochemistry in metallurgy, and principles and practice of spectrochemical analysis.

Card 2/31

Materials of the 10th All-Union Conference (Cont.)	307/1700
Guterman, S.A., and Ya. D. Ryzhbaum. Use of Radioactive Indicators in Spark Discharge Studies	250
Mal'tsev, M.G., Ye. A. Pitayna, and K.I. Taganov. Some Constant Physical Characteristics of Contact Electric Spark Sampling in Spectrum Analysis	252
Borbat, A.M., M.G. Mal'tsev, and K.I. Taganov. Effect of Tertiary Components in Spectrum Analysis With Electric Sampling	255
+ Shayvich, A.B. Effect of Alloy Structure on the Results of Spectrum Analysis of Cast Iron	257
Podoshenakiy, I.V., and G.M. Lapina. Metal Electrode Erosion in a Low-voltage Spark	262
Pillimonov, I.M. Relation of the Composition of the Sample to the Emission Cloud in Light Sources for Spectrum Analysis	265

Card 16/31

+ Used for Res. and. Ferrama Metallurgy

SOV/32-24-10-67/70

AUTHORS: Skornyakov, G. P., Shayvich, A. B.

TITLE: The Second Ural Conference on Spectroscopy (Vtoraya ural'skaya soveshchaniye po spektroskopii)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 10, pp 1295-1295 (USSR)

ABSTRACT: From April 21 to 25, 1958 the conference mentioned in the title took place at Sverdlovsk. It was called by the komissiya po spektroskopii pri Ural'skom filiale Akademii nauk SSSR (Commission for Spectroscopy of the Ural Branch of the AS USSR) and the Ural'skiy Dom tekhniki (Ural House of Technology). About 180 delegates from 104 industrial enterprises and scientific research institutes of the Sverdlovsk, Chelyabinsk and Perm' economic districts, as well as from Moscow, Leningrad, Tomsk, Krasnoyarsk, Irkutsk, Minsk, Kirov and other cities took part in this conference. 45 lectures were given. The lectures by C. P. Semenova, N. A. Pallezhayeva, G. Ye. Zolotikhin and Yu. M. Aleskovskiy dealt with the problems of spectroscopy in gas explosions. The influence of some factors on the results of the spectral analysis of ores and alloys was dealt with in the lectures by Ya. M. Baravlov, M. G. Mal'nev, K. I. Taganov

Card 1/2

SOV/32 24-10-67/70

The Second Ural Conference on Spectroscopy

and others. Furthermore, contributions (with the titles given) by Ya. M. Kamenskiy, A. B. Shayevich, M. N. Shtitman from the Magnitogorskiy metallurgicheskii kombinat (Magnitogorsk Metallurgical Kombinat), by N. S. Sventitskiy, N. G. Isayev and S. B. Shubina are mentioned. At the final session A. B. Shayevich delivered a report of the above mentioned commission "On the State and the Prospects of Using Spectral Analysis in the National Economy of the Ural", which was followed by a vivid discussion. Among other things a reorganization of the Laboratory for Standard Samples UICHM (laboratoriya standartnykh obraztsov UICHM) at the Institute for Standard Samples and Spectral Standards (Institut standartnykh obraztsov i spektral'nykh etalony) was demanded, to increase the output of standards.

Card 2/2

7(6), 18 (3)

AUTHORS:

~~Shayevich, A. B., Kalinskiy, Ya. M.,
Chabanenko, H. I., Perepelkina, M. A.~~

SO7/22-24-10-22/4)

TITLE:

Determination of the Admixtures in Ferroniobium Using Spectral Analysis (Opredeleniye primesey v ferroniobii metodom spektral'nogo analiza)

PERIODICAL:

Zavodskaya Laboratoriya, 1958, Vol 24, Nr 12, pp 1476 - 1479 (USSR)

ABSTRACT:

Niobium is mainly produced and used in the form of iron alloys. The spectral analysis of these alloys is rather complicated and the preparation of the standard sample is tedious. The analysis is simplest when carried out using powdered samples and standards, which can be obtained by successive thinning of the basic sample (Ref 1). A method for spectral analysis of ferroniobium (composition according to MPTU 2735-51 (Table 1)) for Al, Ti, Zr, and Cr, as well as Sn, Cu, and Mn is described. E.D. Krin'fel'd and V.V. Bugrin participated in the experiments. AEG-1 generator

Card 1/2

Determination of the Admixtures in Ferromagnesium Using Spectral Analysis SOV/32-24-12-22/45

with electric arc, current strength of 4 amperes, and a distance between electrodes of 3 mm was used. The spectra were taken on a LSP-28 spectrograph. Error from non-uniform grinding of the sample was avoided by grinding the entire sample to 200 mesh (Figure). The total error for the analysis carried out under the given conditions is $\pm 4\%$. From a comparison with other analytical methods it is apparent that the spectral method can decrease the analytical error by two to three times. There are 1 figure, 1 table, and 2 Soviet references.

ASSOCIATION: Ural'skiy institut chernykh metallov i Klyuchevskiy zavod ferrosplavov (Ural Institute of Ferrous Metals and Klyuchevskiy Plant of Ferroalloys)

Card 2/2

SHAYEVICH, A. M., *Ural. Izv. Akad. Nauk SSSR Ser. Fiz.-Mat. Nauki* -- (AL) "Preparation and Investigation of Calibrating Devices for the Spectral Analysis of Steel, Iron, and Iron Alloys," *Izvestiya*, 1960, 13 pp. (Ural Affiliate, Academy of Sciences USSR) (AL, 1-60, 113)

PHASE I BOOK EXPLOITATION

SOV/3931

Shayevich, Aron Borisovich

Metody otsenki tochnosti spektral'nogo analiza (Methods for Evaluating
the Accuracy of Spectrum Analysis) Sverdlovsk, Metallurgizdat,
1959. 54 p. 5,200 copies printed.

Reviewer: V.V. Nalimov, Candidate of Technical Sciences; Ed.: V.G.
Koritskiy; Ed. of Publishing House: N.N. Tsybhalist; Tech. Ed.:
Ye.D. Turkina.

PURPOSE: The book is intended for the personnel of spectral analysis
laboratories in metallurgical and metalworking industries. It may
also be used by personnel of chemical laboratories, students, and
technicians using the results of analyses.

COVERAGE: The book deals with the problem of accuracy in determining
the chemical composition of industrial materials. The author gives
a classification of errors occurring in spectral analysis, and
describes methods for estimating errors and detecting their sources.

Card 1/4

Methods for Evaluating (Cont.)

SOV/3931

He also discusses the principles of the organization of accuracy control in laboratories for spectrum analysis. The author thanks V.G. Koritskiy, V.V. Nalimov, L.N. Filimonov, Yu.M. Buravlev, V.G. Gaydukova, R.I. Gubkina, A.A. Kurandov, and G.P. Skornyyakov. There are 31 references: 29 Soviet, 1 English, and 1 German.

TABLE OF CONTENTS:

Editor's Foreword	
Author's Foreword	5
Ch. I. Introduction	5
1. General considerations	7
2. The required and the attainable accuracy of determinations	7
3. Sources of errors in spectral analysis	9
Ch. II. Estimating Random Errors (Reproducibility) of Analysis	13
1. General considerations	16
Card 2/4	16

SHAYEVICH, Aron Borisovich, red.; SKORNYAKOV, Gennadiy Pavlovich, red.;
MATLYUK, R.M., tekhn.red.

[Papers from the Second Ural Conference on Spectroscopy]
Materialy soveshchaniia. Pod red. A.B.Shaevicha i G.P.Skorniakova.
Sverdlovsk, Gos.nauchno-tekhn.izd-vo lit-ry po cherno i tsvetnoi
metallurgii. Sverdlovskoe otd-nie, 1959. 206 p. (MIRA 13:2)

1. Ural'skoye soveshchaniye po spektroskopii. 2nd, Sverdlovsk,
1958.

(Spectroscopy--Congresses)

SHAYEVICH, A.B., SHUBINA, S.B.

Essence and field of application of the fractional exponent
method of superposed (synthetic) spectra. Inzh.-fiz.zhur.
no.4:115-118 Ap '60. (MIRA 13:8)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh
metallov, Sverdlovsk. (Spectrum analysis)

SHUBINA, S.B.; SHAYEVICH, A.B.; PROSTAKOV, M.Ye.; BASOVA, Ye.P.

Simplified method for determining tin content of canned
food by means of spectrum analysis. Kons.i ov.pron. 14
no.12:30-31 D '59. (MIRA 13:3)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh
metallov.
(Food, Canned--Analysis) (Tin--Spectra)

SOV/48-23-9-39/57

24(7)

AUTHOR:

Shayevich, A. B.

TITLE:

On the Standards for the Determination of Impurities in
Pulverized Complex Ferro-Alloys

PERIODICAL:

Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959,
Vol 23, Nr 9, pp 1139 - 1140 (USSR)

ABSTRACT:

The production of standards of ferroalloys meets with difficulties because of their high melting point, complicated regulation, and the reliable determination of their chemical composition, and besides considerable influence is found to be exercised by "third" elements and by the structure of the alloys. The author does not consider it to be advisable to use synthetic standards for his investigation. He suggests a "successive rarefaction" of a pulverized standard sample. The practical investigation of "successive rarefaction" ~~is~~ is carried out by issuing standards destined for the determination of impurities in ferrotitanium, ferroniobium, and ferromolybdenum. The quantitative evaluation of the error occurring as the result of the rarefaction and mixing of the components is considered to be of importance. Also, the de-

Card 1/2

On the Standards for the Determination of
Impurities in Pulverized Complex Ferro-Alloys

SCV/48-23-9-39/57

gree of pulverization of the mixture exercises an important influence upon the intensity of the spectral lines, and the influence of "third" elements, as well as of the alloy structure plays an important part. In the experiments carried out by means of an alternating current arc a dependence of the line intensities on the size of the particles (Fig 1) was found, and, in order to prevent this effect, a grain size of 200 mesh is suggested as a standard. The investigation of accuracy showed it to be necessary to use main standards having a composition and a structure which are typical of the nature of the sample. V. V. Bugrina, Ya. M. Kalinskiy, N. I. Chabanenko, M. A. Perepelkina and A. G. Korovina assisted in the experimental part of this work. There are 1 figure and 8 Soviet references.

ASSOCIATION: Ural'skiy institut chernykh metallov (Ural Institute of Ferrous Metals)

Card 2/2

BOGOMOLOV, S.G.; SHAYEVICH, A.B.

Third Ural Symposium on Spectroscopy. Opt.i spektr. 9
no.1:127-129 J1 '60. (MIRA 13:7)
(Spectrum analysis--Congresses)

SOLOV'YEV, V.M. [deceased]; SHAYEVICH, A.B.

Coordinate standards for metals and for the methods of their
analysis. Standartizatsiia 24 no.10:31-34 O '60. (MIRA 13:10)
(Metals--Standards) (Metals--Testing)

Materialy 2 Ural'skogo sverkhchastnye po spektroskopii, Sverdlovsk, 1998 g. (Materials of the Second Ural's Conference on Spectroscopy, Held in Sverdlovsk, 1998) Sverdlovsk, Metallurgizdat, 1999. 209 p. Errata slip inserted. 1,000 copies printed.

Sponsoring Agency: Analyticheskii filial Avtomatnogo nauki SSSR. Konatsiya po spektroskopii i opticheskoi elektronike, ul. Lenina, 13, Sverdlovsk.

Editor: N. M. Zhuravlev.

REMARKS: This collection of articles is devoted for several analytical laboratory workers at ferrous and nonferrous metallurgical plants, for the scientific personnel of the metal-working industry, geological and prospecting organizations, and similar scientific research laboratories.

CONTENTS: The collection contains papers read at the Second Ural's Conference on the spectral analysis of ferrous and nonferrous metals and alloys, steel, ores, agglomerates, refractories and other materials used in industry. The material of the collection is divided into the analysis of steel and light metals and alloys, pure noble metals, etc. The present volume is intended to disseminate the latest experience in working with spectral laboratories, and to report on the results of scientific research. The author thanks R. I. Oukhina and Yu. M. Buravlev. Almost all of the articles are accompanied by references.

Zakharukhin, G. Ye. Investigation of the Interaction of the Components of an Alloy on the Degree of Ionization of Arcs
Alashovskiy, Yu. M. Some Distribution Characteristics of Particles in an Arc Arc

Zolotarevskiy, G. Ye. Investigation of Evaporation Kinetics of Oxidizing Metallic Electrodes of an Arc
Sokolov, A. V., G. I. Klyuz, and V. P. Shirokopylov. Double Reaction of Oxidizing Electrodes of Crystalline

Buravlev, Yu. M. Problem of the Entry of the Probe Material into the Melting Channel During the Spectral Analysis of Steel
Mal'tsev, M. G., and E. I. Zhuravlev. Application of Contact Electric Spark Transducer for Examining the Effect of Composition, Structure, and Mass of Samples During the Spectral Analysis of Certain Alloys

Buravlev, Yu. M., G. P. Kuznetsov, and V. I. Isidorov. Investigation of the Effect of Structure on the Spectral Analysis Results of Structural Steel
Buravlev, Yu. M., V. I. Isidorov, and D. Ye. Zhuravlev. Effect of Temperature on the Results of the Spectral Analysis of High-Speed Cutting Steel

Buravlev, Yu. M., V. I. Isidorov, G. V. Korotchenko, V. P. Korotchenko, and V. R. Zhuravlev. Spectral Analysis of Steel with a Modernized PDS-1 Instrument
Sensitivit' N. 9. Spectral Analysis of Gases Contained in Metals

Shayvritsh, A. B. Spectral Analysis of Multicomponent Systems with a High and Varying Content of Components
Shayvritsh, A. B., M. A. Perovskiy, and B. A. Kuznetsov. Spectral Analysis of 15% and 75% Perovskite

Kaluzhnyy, Yu. M., A. B. Shayvritsh, V. V. Bugrimov, Y. I. Cherkashin, and V. R. Zhuravlev. Spectral Analysis of Perovskite, Perovskite-Titanium, and Titanium Concentrate
Kozlov, A. V. Role of Internal Standard in the Spectral Analysis of Ferrous Ferroalloys

Khalitskiy, Ya. M., V. V. Bugrimov, and A. K. Zhuravlev. Spectral Analysis of Chromium-Titanium Alloys
Lobovoy, I. D. Spectral Methods of Analyzing Products of the Magnesium and Titanium Industry

Pechina, D. A. Application of Spectral Analysis at the Sverdlovsk Metallurgical Plant
Gavrilov, G. I., and L. G. Sokolova. Spectral Analysis at the "Ural'skiy metal" Plant

S/032/6-036/012/009/036
B020/2

AUTHORS: Shubina, S. B., Shayevich, A. B., and Basova, Ye. P.
TITLE: Spectroscopic Analysis of Ferro Alloys and Chromium for
Non-ferrous Metal Impurities
PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 12,
pp. 1364-1366

TEXT: In the present paper the spectroscopic methods of determining lead, tin, antimony, bismuth, arsenic, zinc, and cadmium in ferrochromium, chromium, ferroniobium, ferrovanadium, and ferromolybdenum are described. Determination of these impurities in the relatively high-melting substances with multiband spectra may be carried out by means of fractional distillation in the arc by means of an evaporator or by a previous chemical preparation. If the impurity content is not too low, the fractional distillation from the channel of the "cup-shaped" electrode (Ref. 1) in the a.c. arc is most convenient. The test sample was a powder to which sulfur, soda, and graphite were added to increase spectral sensitivity. The results obtained by analysis on the basis of the "absolute" blackenings of the

Card 1/4

Spectroscopic Analysis of Ferro Alloys and
Chromium for Non-ferrous Metal Impurities

S/032/60/026/012/009/036
E020/B056

bands were sufficiently reproducible. The standards were prepared synthetically from the pulverulent sample with the lowest impurity content, the samples with solutions of known impurity content were wetted and dried. As the decomposition temperature and the sublimation temperature of the oxides of impurity elements and the evaporation temperature of the metal impurities is near the heating temperature of the sample in the electrode channel, the conditions of entry into the arc are the same for an element determined from samples and standards in the case of quantitative evaporation. As an example, the evaporation curves of lead from a standard sample ferroniobium and from synthetically prepared standards are mentioned (Fig.). The initial standard solutions are specially prepared for each impurity, because all of them together cannot be kept in solution. Each solution contained 0.1% of the impurity. The weighed portion of 80 mg of the average sample, granulated to 150 to 200 mesh, is introduced into a channel of a carbon electrode having a diameter of 6 mm. As a second electrode, a carbon rod with a diameter of 6 mm was used, which was ground to the shape of a truncated cone. For excitation of the spectrum, a ДГ-2 (DG-2) generator with 15-16a was used. For the determination of tin and arsenic in ferrochromium and chromium and of arsenic

Card 2/4

Spectroscopic Analysis of Ferro Alloys and
Chromium for Non-ferrous Metal Impurities

S/032, 60/026/012/009/036
B020/3056

in ferroniobium, elementary sulfur in a quantity of 1/10 of the volume of the analyzed substance is added to the samples. For suppressing the spectrum of the basic material in the analysis of ferrovanadium and increasing the sensitivity in the determination of tin in these alloys, graphite in a quantity of 0.25 - 0.50 of the volume of the analyzed substance is introduced into the sample. The ИСП-28 (ISP-28) spectrograph having a slit width of 0.010 mm was used. The analytical bands are given in Table 1. The analysis is carried out according to the three-standard-technique. The reproducibility of the determinations is characterized by the mean square error of the determination of three samples, and amounts to 6 - 12%. The limits within which the certain impurities may be detected are given in Table 2. In one working layer, 10-15 samples may be analyzed for all impurities by means of the method described. There are 1 figure, 2 tables, and 5 references: 4 Soviet and 1 US.

↓

Card 3/4

Spectroscopic Analysis of Ferro Alloys and
Chromium for Non-ferrous Metal Impurities

S/032/60/026/012/009/036
B020/B056

ASSOCIATION: Ural'skiy nauchno-issledovatel'skiy institut chernykh
metallov
(Ural Scientific Research Institute for Ferrous Metals)

J

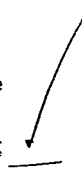
Card 4/4

S/081/61/000/003/005/019
A166/A129

AUTHORS: Prostakov, M. Ye., Kochergin, V. P., Shayevich, A. B.

TITLE: The composition of the surface layers of some metals and alloys after passivation in alkaline solutions of sodium chromate and bichromate

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 3, 1961, 290, abstract 3I103.
(Byul. nauchno-tekhn. inform. Ural'skiy n.-i. in-t Chern. metallov, 1959, no. 7, 91 - 94)

TEXT: Spectral analysis was used to determine the Cr content in passive films on passivated tin plate and also on passivated samples of galvanized Fe, brass and Cu, coated with an Sn-Pb solder. Passive films on passivated tin plate proved to be durable in boiling water and partly durable in alkaline solutions. Complete destruction of these films was observed in a boiling solution containing NaCl (200 g/l) and HCl (acid) (4 g/l). 

Author's summary

[Abstracter's note: Complete translation]

Card 1/1

S/137/61/000/011/115/123
A060/A101

AUTHORS: Shayevich, A.B., Prostakov, M.Ye.

TITLE: Determining the composition of the surface layers of metals, alloys, and electrically nonconducting substances by the method of spectral analysis of large portions of the specimen surface

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1961, 8, abstract 11K46. ("Byul. nauchno-tekhn. inform. Ural'skiy n.-i. in-t Chern. metallov", 1960, No 8, 108 - 110)

TEXT: In order to determine the quantity of Cr deposited on the surface of tin plate specimens in the shape of circular disks 70 mm diameter were subjected to spectral analysis. A condensed spark obtained by means of a standard generator ИГ-3 (IG-3) (L 0.01 μ f. H 0.05 mh) was used as the exciting source. The spectra obtained in the first and subsequent spark treatments of one and the same portion of the surface of the specimen, contain the lines of Cr, Sn, and Fe. The intensity of these lines varies in accordance with the variation in the concentration of the elements from the surface to the depth

Card 1/2

S/137/61/000/011/115/123
A060/A101

Determining the composition of the

of the specimen. The Cr content in the surface layer constituted about $4 \cdot 10^{-10}$ g/cm². An estimate was made of the stability of the passive films on the tin plate in solutions of alkalis and acids as a function of variation in temperature of the solutions, and the composition of the surface layer of passivated specimens of galvanized Fe, of brass J162 (L62) and of electrolytic Cu clad with Sn-Pb solder was determined. In order to determine the composition of electrically nonconducting surface layers or of layers on nonconducting backings, it is possible to use two electrodes of neutral materials, situated at an angle of $\sim 45^\circ$ to the surface of the specimen, and the arc is ignited between these electrodes.

L. Vorob'yeva

[Abstracter's note: Complete translation]

Card 2/2

S/137/61/000/012/142/149
A006/Ai01

AUTHORS: Shayevich, A. B., Perepelkina, M. A., Korovina, A. G.

TITLE: Spectrographical determination of copper and silicon in ferro-molybdenum

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1961, 6, abstract 12K32 ("Byul. nauchno-tekhn. inform. Ural'skiy n.-i. in-t Chern. metallov" 1960, no. 8, 111-112)

TEXT: The authors developed two variants of determining Cu and Si in ferro-molybdenum (I). By variant 1, powder of standard specimen I was mixed with pure Fe_2O_3 and graphite in ratios of 1 : 2 : 3; 1 : 3 : 4, 1 : 4 : 5 and 1 : 5 : 6. The samples to be analyzed are crushed until 0.071 mm size and diluted in a 1 : 4 : 5 ratio. Standard graphite electrodes are filled with the mixtures obtained. To perform the analysis, an ИСП-28 (ISP-28) quartz spectrograph is used with 0.015 mm slit width. The analysis is made by the three standard method. In variant 2, a set of preliminarily analyzed standard samples is employed. The analysis conditions are analogous to variant 1, only 40 second preliminary roasting is performed additionally and the following lines are used

Card 1/2

S/137/61/000/012/142/149
A006/A101

Specyrographical determination ...

for photometry: Cu 2824.37 - Mo 2829.94 Å and Si 2528.51 - Mo 2578.77 Å,
(without attenuator). The mean square error of the result is about 4 - 5%
(relatively) as an average of 3 determinations.

L. Vorob'yeva

[Abstracter's note: Complete translation]

Card 2/2

ZAYDEL' A.N.; PILIPCHUK, B.I.; BABKO, A.K.; SHAYEVICH, A.B.; DOLINSKIY, Ye.F.

On the establishment of standards in the methods of presenting
experimental data. Zav.lab. 27 no.10:1273-1278 '61.
(MIRA 14:10)

1. Fiziko-tekhnicheskiy institut AN SSSR (for Zaydel'). 2. Vse-
soyuznyy nauchno-issledovatel'skiy institut metrologii im D. I.
Mendeleyeva (for Pilipchuk, Dolinskiy). 3. Institut obshchev i
neorganicheskoy khimii AN USSR (for Babko). 4. Ural'skiy nauchno-
issledovatel'skiy institut chernykh metallov (for Shayevich).
(Mathematical statistics)

S/137/62/000/004/194/201
A154/A101

AUTHORS: Shubina, S. B., Shayevich, A. B., Basova, Ye. P.

TITLE: Quantitative spectrographic analysis of ferrochrome, chromium, ferroniobium, ferrovanadium and ferromolybdenum for the content of small admixtures of non-ferrous metals

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 6, abstract 4K31 ("Nekotor. vopr. emission. i molekulyarn. spektroskopii", Krasnoyarsk, 1960, 82-90)

TEXT: An 80 mg test batch is introduced into the channel of a carbon electrode 6 mm in diameter; a 6 mm conical carbon rod is used as a second electrode. Test sample is heated and a spectrum is excited by a ДГ-2 (DG-2) generator (I = 15 - 16 amp). When Sn and As admixtures are being determined in Fe-Cr and Cr. or when As is determined in Fe-Nb, test samples are supplemented with S. in an amount of 0.1% of the volume of the analyzed substance. The analysis is carried-out with the aid of ИСП-28 (ISP-28) spectrograph whose slit has a width of 0.010 mm. Test samples are analyzed by the three-standards method. The reproducibility of the determinations is characterized by a mean

Card 1/2

S/137/62/000/004/194/201
A154/A101

Quantitative spectrographic analysis ...

square error equal to 6 - 12% of the relative ones. One laboratory assistant can analyze, for all admixtures, 10 - 15 test samples per shift.

L. Vorob'yeva

[Abstracter's note: Complete translation]

Card 2/2

AUTHORS:

Shayevich, A. B., Prostakov, M. Ye.

S/081/62/000/012/019/063
B168/B101

TITLE:

Determination of the composition of surface layers of metals, alloys and non-conducting materials by spectrum analysis of large areas of the surface of a sample

PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 12, 1962, 163, abstract 12D140 (Sb. "Nekotoryye vopr. emission. i molekulyarn. spektroskopii". Krasnoyarsk, 1960, 78 - 81)

TEXT: The application of spectrum analysis methods to the study of the composition of thin surface layers is limited by the relatively large depth effect of the arc or spark discharge. In order to eliminate this disadvantage it is proposed that the moving-electrode method should be used. With this method the specimen being analysed is continuously displaced in relation to the upper electrode during the spectrum-recording process. The extent to which the affected depth of the surface layer can be reduced is limited in this case by the depth affected by the single spark discharge - either by the unit spark of the a.c. arc or by the per-

Card 1/2

S/081/62/000/012/019/063
B168/B101

Determination of the composition of ...

sistence of the d.c. arc. The advantage of this method lies in the fact that the non-uniformities of the layer under examination are averaged out. The specimens being analyzed are moved by means of an $C\bar{A}-2$ (SD-2) electric motor which rotates a moving stage at a speed of 1 rpm. The spectra are excited in the discharge of a condensed spark from an $W\bar{P}-3$ (IG-3) generator ($C = 0.01 \mu f$, $L = 0.05 mH$). A study of the surface composition of unpassivated, electrochemically passivated and chemically passivated samples of tinplate showed that $4 \cdot 10^{-10} \text{ g Cr per cm}^2$ of surface present in the case of the last group of samples only, which agrees with the authors' theory of non-conducting surface layers. For determination of the composition of inert materials set at an angle of 45° to the surface of the specimen. The substance of the surface layer is vaporized to use two electrodes of inert materials by means of a superimposed magnetic field. Results of analyses by this method depend largely on the structure and composition of the specimen. [Abstracter's note: Complete translation.]

Card 2/2

DUBROV, N.F.; GORLACH, I.A.; PRIVALOV, S.S.; SHAYEVICH, A.B.; SHUBINA, S.B.

At the Urals Research Institute of Ferrous Metals. Stal' 22
no.9:812, 854 S '62. (MIRA 15:11)
(Ural Mountain region--Metallurgical research)

SHAYEVICH, A.B., kand.tekhn.nauk

Interfactory school for the exchange of experience of
spectral analysis laboratories. Zav.lab. 28 no.6:756-757
'62. (MIRA 15:5)

1. Rukovoditel' Mezhzavodskoy shkoly po obmenu opytom raboty
laboratoriy spektral'nogo analiza.
(Spectrum analysis)

SHAYEVICH, A. B.

Regulating some basic terms used in measurements. Izv. tekhn.
no.10:1-3 0 '62. (MIRA 15:10)

(Mensuration--Terminology)

SHAYEVICH, A.B.; SHUBINA, S.B.

Possibility of controlling liquid cast iron without
sampling. Zav.lab. 28 no.4:447-449 12. (MIRA 15:5)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh
metallov.

(Cast iron- Spectra)

SHAYEVICH, A.B.

Work experience of the Central Branch Laboratory of Spectral
Analysis. Zav.lab. 28 no.7:888-889 '62 (MIRA 15:6)

1. Nachal'nik laboratorii Ural'skogo nauchno-issledovatel'skogo
instituta chernykh metallo. (Spectrum analysis) (Testing laboratories)

SHUBINA, S.B.; SHAYEVICH, A.B.; KILINA, S.I.; MEL'NIKOV, S.I.; BAZANOVA, L.A.

Rapid determination of oxygen in metals by spectral analysis.

Zav.lab. 28 no.3:942-943 '62.

(MIRA 15:11)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov.
(Metals--Oxygen content) (Spectrum analysis)

Sheets Rec. Yu. A.

105

PHASE I BOOK EXPLOITATION

SOV/6181

Ural'skoye soveshchaniye po spektroskopii. 3d, Sverdlovsk, 1960. Materialy (Materials of the Third Ural Conference on Spectroscopy) Sverdlovsk, Metallurgizdat, 1962. 197 p. Errata slip inserted. 3000 copies printed.

Sponsoring Agencies: Institut fiziki metallov Akademii nauk SSSR. Komissiya po spektroskopii; and Ural'skiy dom tekhniki VSNTO.

Eds. (Title page): G. P. Skornyakov, A. B. Shayevich, and S. G. Bogomolov; Ed.: Gennadiy Pavlovich Skornyakov; Ed. of Publishing House: M. L. Kryzhova; Tech. Ed.: N. T. Mal'kova.

PURPOSE: The book, a collection of articles, is intended for staff members of spectral analysis laboratories in industry and scientific research organizations, as well as for students of related disciplines and for technologists utilizing analytical results.

COVERAGE: The collection presents theoretical and practical problems of the application of atomic and molecular spectral analysis in controlling the chemical composition of various materials in ferrous and nonferrous metallurgy, geology, chemical industry, and medicine. The authors express their thanks to G. V. Chentsova for help in preparing the materials for the press. References follow the individual articles.

Materials of the Third Ural Conference (Cont.)	SOV/6181
Fishman, I. S. Remarks on a system of standards for analysis of complex alloys	73
Shiryayeva, N. Ye., Yu. I. Mal'kov, and R. A. Kozlova. Photoelectric-stylometer analysis of vanadium cast irons	76
Basova, Ye. P., A. B. Shayevich, and S. B. Shubina. Spectrographic determination of harmful non-ferrous metal impurities in raw material intended for production of metallic chromium	77
Sorokina, N. N. Spectral determination of cerium, lanthanum, and barium in steel	80
Shayevich, A. B., and N. D. Startseva. Spectral determination of vanadium, manganese, silicon, and chromium in ferro-vanadium	86
Gutkina, R. I. Chemical-spectral method of analysis of high-purity nickel	88
Card 7/15	

SHAYEVICH, A.B.; SHUBINA, S.B.

Problem of standardization during spectral analysis. Zav.lab. 29
no.4:429-431 '63. (MIRA 16:5)

1. Urálskiy nauchno-issledovatel'skiy institut chernykh metallov.
(Spectrum analysis--Standards)

BASOVA, Ye.P.; ZHOROVA, N.I.; SHAYEVICH, A.B.; SHUBINA, S.B.

Spectrographic determination of nonferrous metal impurities
in raw materials used in the manufacture of ferroalloys and
heat-resistant alloys. Zav. lab. 28 no.9:1075-1076 '62.

(MIRA 16:6)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov.
(Alloys) (Nonferrous metals—Spectra)

SHUBINA, S.B.; SHAYEVICH, A.B.; DEMENT'YEVA, V.G.

Determination of hydrogen in steels by spectral analysis. Zav.lab.
29 no.5:552-555 '63. (MIRA 16:5)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov.
(Steel--Hydrogen content) (Spectrum analysis)

SHAYEVICH, A.B.; SOLOV'YEV, V.M. [deceased]; TOPALOV, L.I.

Principles of the effective analytical control in industry. Zav.
lab. 29 no.8:1019-1022 '63. (MIRA 16:9)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov
i Zaporozhskiy zavod ferrosplavov.
(Testing laboratories) (Metallurgy—quality control)

BOGOMOLOV, S.G.; GUDKINA, R.I.; SHAYEVICH, A.B.

Ural Conference on Spectroscopy. Zav.lab. 29 no.11:1403-1401 '63.
(MIRA 10:12)

SHAYEVICH, Aron Borisovich; OZERETSKAYA, A.L., red.izd-va; KOROVINA,
M.A., tekhn. red.

[Methods for determining the accuracy of spectrum analysis]
Metody otsenki tochnosti spektral'nogo analiza. Izd.2., ispr.
i dop. Moskva, Metallurgizdat, 1964. 70 p. (MIRA 17:3)

SHAYEVICH, A.B.

Improving the preparation work required for the introduction of spectral analysis methods into industry. Zav lab. 30 no.4:387-388 '64. (MIRA 17:4)

1. Nachal'nik bazovoy laboratorii Sredne-Ural'skogo soveta narodnogo khozyaystva.

SRBIN [Shayevich, A.B.; [Kovalev, V.M.; [Kovalev, V.M.];
TOPALOV, I.I. [Topalov, I.I.]; GOSIWSKI, Zdzislaw (translator)

principles of national analytical control in industry.
January 10 no.017536 1964

SHAW, R. W.

Effect a year of analytical chemistry and the principles of
chemical water? (ms. Lab. 90 m. 1 800 205 194)

(MIFA 18.3)

SHAYEVICH, A.B.; DZHELENSKAYA, V.V.; ZHOROVA, N.I.; KAZARINA, G.P.;
TOROVINA, A.G.

Spectrographic determination of hydrogen in nickel and copper
and of oxygen in copper. Zav. lab. 30 no.11:1343-1346 '64
(MIRA 18:1)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh
metallov.

IVANOVA, V.D.; TOPALOV, L.I.; SHAYEVICH, A.B.; DANILEVSKAYA, V.V.;
SAZONOVA, M.K.

Spectral analysis of open-hearth slags by the method of condi-
tional integral graphics. Zav. lab. 30 no.11:1346-1348 '64
(MIRA 18:1)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh
metallov i Zaporozhskiy zavod ferrosplavov.

SHAYEVICH, Aron Borisovich; SHUBINA, Sof'ya Borisovna

[Industrial methods of spectrum analysis] Promyshlennyye
metody spektral'nogo analiza. Moskva, Metallurgiya, 1965.
223 p. (MIRA 18:2)

SHAYEVICH, A.B.; MEL'NIKOV, S.I.; DANILEVSKAYA, V.V.

Possibility of controlling the carbon content of carbureted iron melts by optical spectroscopy without sampling. Zav. lab. 31 no.2: 169-172 '65. (MIRA 18:7)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov.

(A) L 12137-66

ACC NR: AP6000032

SOURCE CODE: UR/0115/65/000/010/0031/0034

AUTHOR: Shayevich, A. B.

17
B

ORG: None

TITLE: Metrological aspects of industrial analytical control

SOURCE: Izmeritel'naya tekhnika, no. 10, 1965, 31-34

TOPIC TAGS: analytic chemistry, metrology, quality control, *SCIENTIFIC STANDARD*

ABSTRACT: The analysis of the chemical composition of substances remains a complex process consisting of many different operations which are often difficult to control. The chief causes of the limitations of analytical procedures are discussed. In this connection, the author examines from a general point of view such problems as the substantiation of the required accuracy of analyses and the degree of correspondence between this parameter and the potentialities of analytical methods, considers ways of maintaining a metrological unity in measurements of composition, and discusses the standardization of analytical methods. A treatment of this type is important both in general and also in connection with the automation of industrial analytical control. Orig. art. has: 8 formulas.

SUB CODE: 07, 14 / SUBM DATE: none / ORIG REF: 006
UDC: 389.0:543.08

Card 1/1 HW

2

KURAYEV, A.V.; SEMENKOV, P.L.; BLEYZ, N.G.; BULAVA, V.P.; VYAZ'MIN, V.A.;
GOLUBEV, B.S.; DYSHMAN, B.M.; KARLIN, B.S.; KAYUKOV, G.I., KUGEL',
N.V.; MASHATIN, V.I.; BAGUSKAYA, L.F.; RUBINSHTEYN, S.M.; SEFRANOV,
A.B.; TARASOV, L.A.; FEDOROVA, A.A.; FEDOROV, L.N.; TSEPKIN, M.F.;
SHAYEVICH, A.G.; VASIL'YEVA, I.A., red. izd-va; TIKHANOV, A.Ya.,
tekhn. red.

[ZIL-158 and ZIL-158A motorbuses; instructions for operation] Avtobusy
ZIL-158 i ZIL-158A; instruktsiia po ekspluatatsii. Moskva, Gos.
nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 193 p.
(MIRA 11:7)

1. Moskovskiy avtomobil'nyy zavod.
(Motorbuses)

ARMAND, G.B.; VYAZ'MIN, V.A.; GRINSHTEYN, L.M.; GOL'DBERG, G.I.; GOLUBEV,
B.S.; KASHLAKOV, M.V.; KRASNOPEVTS'EV, M.P.; KUZNETSOV, S.I.;
KURAYEV, A.V.; KAYUKOV, G.I.; MASHATIN, V.I.; MOLOTILOV, V.I.;
NERUSH, A.R.; PRAL', G.I.; RAGUSKAYA, L.F.; RUBINSHTEYN, S.M.;
SEMENKOV, P.L.; TARASOV, L.A.; FEDOROVA, A.A.; TSEPKIN, M.F.;
SHAYEVICH, A.G.; ZARUBIN, A.G., otv.red.; VASIL'YEVA, I.A., red.
izd-va; SOKOLOVA, T.F., tekhn.red.

[ZIL-157 motortruck; operation and service] Avtomobil' ZIL-157;
instruktsiia po ekspluatatsii. Gos.nauchno-tekhn.izd-vo mashino-
stroit.lit-ry, 1958. 235 p. (MIRA 11:12)

1. Moskovskiy avtomobil'nyy zavod.
(Motortrucks)

MIKHIN, M.L., kand.tekhn.nauk; KHMEL'NITSKIY, E.Ye.; SHAYEVICH, A.G.; KARAVAYEV,
V.I.

New radiators for the ZIL motor vehicles. Avt.prom. no.9:10-14
S '60. (MIRA 13:9)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-
issledovatel'skiy avtomobil'nyy avtomotornyy institut i Moskovskiy
avtozavod imeni Likhacheva.

(Motor vehicles--Radiators)

MINKIN, M.L., kand.tekhn.nauk; KHMEL'NITSKIY, E.Ye.; SHAYEVICH, A.G.; KARAVAYEV, B.I.; PAPIN, A.A.

Increasing the effectiveness of cooling systems for automobile engines. Avt. prom. no.2:10-13 F '61. (MIRA 14:3)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut i Moskovskiy avtozavod imeni Likhacheva.

(Automobiles--Engines--Cooling)

SOV/97-58-10-14/17

AUTHORS: Shayevich, A.Z., and Gorin, G.I. (Engineers)

TITLE: Strength of Frozen Concrete (O prochnosti betona v zamorozhennom sostoyanii)

PERIODICAL: Beton i zhelezobeton, 1958, Nr 10, p 396 (USSR)

ABSTRACT: The authors carried out investigations on concrete cubes subjected to frost for a duration of 3 - 4 days, with the object of clarifying the conditions of increase of strength in relation to temperature of the surrounding air and the type of concrete, and especially to determine the minimal temperature below zero at which it is admissible to test precast reinforced concrete constructions in the open air. This is of great importance for those factories which do not have heated premises with stands for testing reinforced concrete constructions during the winter. Details of the tests carried out as well as the results are given in a figure showing the increase of strength of the concrete in relation to temperature of the surrounding air. The tests showed that freezing of concrete immediately after curing appears to have no harmful effects. The concrete cubes tested in warm conditions continued to gain strength, but not those subjected to frost. This can

Card 1/2

Strength of Frozen Concrete

SOV/97-52-10-14/17

be explained by the fact that after curing a relatively small amount of free water remains in the concrete, which interrupts the hardening process. In conclusion, the results showed that it is possible to test reinforced concrete constructions when the temperature of the surrounding air is not lower than -4°C . There is 1 figure.

Card 2/2

BUTKEVICH, A., kand.tekhn.nauk; SHAYEVICH, Ya., inzh.

Stargazer (on the occasion of IU.V.Kondratiuk's 60th birthday).
Av.i kosm. 45 no.8:30-31 '62. (MIRA 15:8)
(Kondratiuk, IUrii Vasil'evich, 1900-)

SHAYV . . .

1. Determination of "initial pressure" for sagging soils in Novosibirsk.
Gen., fund. i mekh. grun. 7 no.4:20 '65.

(MIRA 18:8)

SHAYLIVICH, Ya.Ye. (Novosibirsk)

Compacting settling soils with heavy tampers. Osn., fund. i mekh. grun.
5 no.2:28-29 '63. (MIRA 16:3)

(Soil stabilization)

KUVYKIN, S.I.; OVANESOV, G.P.; ZOLOYEV, T.M.; SHAYEVSKIY, Yu.I.

Oil recovery from a nonuniform stratum. Geol. nefiti i gaza
5 no.12:23-30 D '61. (MIRA 14:11)

1. Bashkirskiy sovnarkhoz.
(Bashkiria--Oil reservoir engineering)

USENKO, V.F.; SHAYEVSKIY, Yu.I.; PORTNOV, V.I.

Analysis of temperature measurements along the bore of wells
operating below saturation pressure. Nefteprom. delo no.2:
21-25 '63 (MIRA 17:7)

1. Neftepromyslovoye upravleniye "Aksakovneft" ".

AKOPYAN, S.O.; BAZEV, N.S.; DEMINA, A.V.; SHAYEVSKIY, Yu.I.; YUFEROV, Yu.K.

Development of the layer D₁ in the Shkapovo oil field.
Nefteprom. delo no.6:3-8 +63. (MIRA 16:10)

1. Neftepererabatyvayushcheye upravleniye "Aksakovneft'."
(Shkapovo region--Petroleum production)

SHAYEVSKIY, Yu.I.; USENKO, V.F.; PORTNOV, V.I.

Results of investigating wells of the Shkapovo oil field
at pressures below the saturation pressure. Nefteprom. delo,
no.4:3-7 '64. (MIRA 17:6)

1. Neftapromyslovoye upravleniye "Aksakovneft'" i Ufimskiy
neftyanoy nauchno-issledovatel'skiy institut.

End Div. No. (10/1/1961)

Document: at the end of the report section.
Doc. version: 1 - price: 1 - 3:536-536 - 1/5. (MIA 12:4)

SHAYIN, A.A.

Case of late metastasis of cancer of the breast. Vop. onk. 6 no.3:
82-83 Mr '60. (MIRA 14:2)

(BREASTS--CANCER)

(ABDOMEN--CANCER)

SHAYKEVICH, A. S.

Voprosi Kachestva Promyshlennovo Osveshcheniya (Questions of Quality of
Industrial Lighting), Moscow-Leningrad, 1948.

1. SHAYKEVICH, A. S.
2. USSR (600)
4. Labor productivity
7. Functions of sight and labor productivity under conditions of luminescent lighting. Izv. AN SSSR. Ser. fiz. 15 No. 6, 1951.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

SHAYKEVICH, A.S., kandidat tekhnicheskikh nauk.

Study of the glare of fluorescent lamps. Sretotekhnika 2 no.3:
5-11 My '56. (MLBA 9:8)

1. Leningradskiy institut okhrany truda Vsesoyuznogo Tsentral'nogo
Soveta professional'nykh soyuzov.
(Fluorescent lamps)

10/1/5
GLAGOLEVA, Tat'yana Aleksandrovna; KANAVETS-YAKOVLEVA, Ol'ga Lukinichna;
POLLAK, Sergey Vladimirovich; SOKOLOV, Mikhail Vasil'yevich, prof.;
SHAYKEVICH, Aleksandr Semenovich; ASHKENAZI, Z.I., red.;
LARIONOV, G.Ye., tekhn.red.

[Lighting for construction and assembly work at hydroelectric
power stations] Osveshchenie stroitel'nykh i montazhnykh rabot
pri sooruzhenii gidroelektrostantsii. Pod red. M.V.Sokolova.
Moskva, Gos.energ.izd-vo, 1957. 142 p. (MIRA 11:1)
(Building) (Lighting)

SHAYKEVICH, A.S., kandidat tekhnicheskikh nauk.

Problems in the discussion of glare in fluorescent lighting. Svetotekhnika 3 no.2:22-24 F '57. (MLRA 10:3)

1. Leningradskiy institut okhrany truda Vsesoyuznogo Tsentral'nogo soveta professional'nykh soyuzov. (Fluorescent lighting)

DANTSIG, N.M., professor.;GLAGOLEVA, T.A., kandidat tekhnicheskikh nauk.;KROL',
TS. I., kandidat tekhnicheskikh nauk.;SHAYKVEKCH, A.S., kandidat
tekhnicheskikh nauk.

New projected norms for artificial lighting. Svetotekhnika 3 no.5:15-17
My '57. (MIRA 10:5)

(Lighting--Standards)

SHAYKEVICH, A.S., kand.tekhn.nauk.

Methods of working out lighting norms for plants of the different
branches of industry. Svetotekhnika 3 no.10:28-30 0 '57.

(MIRA 10:10)

1. Leningradskiy institut okhrany truda Vsescyuznogo tsentral'nogo
soveta profsoyuzov.

(Lighting--Tables, calculations, etc.)

SHAYKEVICH, A.S., kand. tekhn. nauk.

Classification of visual work. Svetotekhnika 4 no.5:13-20 My '58.
(MIRA 11:5)

1. Leningradskiy institut okhrany truda Vsesoyuznogo tsentral'nogo
soveta profsoyuzov.

(Sight) (Lighting)

BEL'KIND, L.D.; KNORRING, G.M.; LEVITIN, I Ye.; MESIKOV, V.V.; RYANOV,
M.S.; SOKOLOV, M.V.; TIKHODIYEV, P.M.; SHAYEVICH, A.S.

Aleksandr Anan'evich Trukhanov; on the occasion of the 60th
anniversary of his birth. Svetotekhnika 4 no. 7:23 J1 '58.
(MIRA 11:7)

(Trukhanov, Aleksandr Anan'evich, 1898-)

TIKHODEYEV, P.M.; FEDOROV, B.F.; VOLOTSKOY, N.V.; TEIYAT'YEV, V.V.; ZIL'BER, D.A.;
SAPOZHNIKOV, R.A.; SHAYKEVICH, A.S.; KNORFING, G.M.; SEREBRYAKOV, V.M.;
DADIOMOV, M.S.; LEVIT, G.O.

Professor Viacheslav Vasil'evich Novikov; on his 70th birthday.
Svetotekhnika 5 no.2:30 F '59. (MIRA 12:1)
(Novikov, Viacheslav Vasil'evich, 1888-)

SHAYKEVICH, A.S. kand.tekhn.nauk

Widening the area of problems regulated by norms of industrial lighting. Svetotekhnika 5 no.5:8-12 My '59. (MIRA 12:7)

1. Leningradskiy institut okhrany truda Vsesoyuznogo tsentral'nogo soveta profsoyuzov.
(Lighting)

SPAYEVICH, A.S., kand.tekhn.nauk

Remarks concerning the project of the new edition of "Norms on electric lighting." Svetotekhnika 8 no.1:24-26 Ja '62.
(MIRA 15:1)

1. Leningradskiy institut okhrany truda Vsesoyuznogo tsentral'nogo soveta professional'nykh soyuzov.
(Electric lighting--Standards)

GUREVICH, N.N., inzh.; SHAYKEVICH, A.S., kand.tekhn.nauk

Visibility of volumetric components under different lighting conditions. Svetotekhnika 8 no.2:10-17 F '62. (MIRA 15:1)

1. Leningradskiy institut okhrany truda Vsesoyuznogo tsentral'nogo soveta professional'nykh soyuzov.

(Visibility)
(Electric lighting)

SHAYKEVICH, Aleksandr Serenovich; KNORRING, G.M., kna.d tekhn. nauk,
retsenzent; SAPOZHNIKOV, R.A., doktor tekhn. nauk, prof.,
nauchnyy red.; SOBOLEVA, Ye.M., tekhn.red.

[Quality of industrial electric lighting systems and methods
for their improvement]Kachestvo promyshlennogo osveshchenia
i puti ego povysheniia. Moskva, Gosenergoizdat, 295 p.
(MIRA 15:11)

(Electric lighting) (Industrial plants--Lighting)

IGNATOK, A.I., red.; SHAYKEVICH, A.S., red.; VOLKOV, Yu.N., red.;
EL'TERMAN, Ye.M., red.; PERLOVA, S.A., red.; NIKOLAYEV, N.A.,
red.; ERENBURG, G.S., red.; BUTKOVSKAYA, Z.M., red.;
CHERNILOVSKAYA, F.M., red.; YANKOVSKIY, V.F., red.; MALYGIN,
O.P., red.; BOGOMOLOV, I.G., red.; KOZLOV, A.A., red.; SMIRNOV, I.I.,
inzh., red.; ROGOV, B.A., red.; PETRUKHOVA, G.N., red. izd-va;
DEMKINA, N.F., tekhn. red.

[Safety and industrial sanitation regulations for making boilers
and metal constructions] Pravila tekhniki bezopasnosti i proiz-
vodstvennoi sanitarii pri proizvodstve kotel'nykh rabot i metallo-
konstruktsii. Utverzhdeny 29 avgusta 1961 goda. Moskva, Mashgiz,
1962. 28 p. (MIRA 15:12)

1. Profsoyuz rabochikh mashinostroyeniya SSSR. 2. Glavnyy tekhnicheskiy inspektor Tsentral'nogo komiteta profsoyuza rabochikh mashinostroyeniya (for Ignatok). 3. Starshiye nauchnyye sotrudniki Leningradskogo instituta okhrany truda Vsesoyuznogo tsentral'nogo soveta profsoyuzov (for Shaykevich, Volkov, El'terman, Perlova). 4. Nachal'nik otdela Vsesoyuznogo proyektno-tekhnologicheskogo instituta tyazhelogo mashinostroyeniya (for Nikolayev). 5. Starshiye nauchnyye sotrudniki Leningradskogo instituta gigiyeny truda i profzabolevaniy (for Erenburg, Butkovskaya, Chernilovskaya).
(Continued on next card)

TIKHODEYEV, Pavel Mikhaylovich, prof., doktor tekhn.nauk; SHAYKEVICH, A.S.,
red.; SOBOLEVA, Ye.M., tekhn.red.

[Measurement of light in lighting engineering; photometry]
Svetovye izmereniia v svetotekhnike; fotometriia. Izd.2.,
perer. Moskva, Gosenergoizdat, 1962. 463 p.

(MIRA 15:12)

(Photometry)

(Lighting)

TIKHODEYEV, P.M., doktor tekhn.nauk, prof.; SHAYKEVICH, A.S., kand.
tekhn.nauk

Problems concerning the future development of industrial
electrical lighting norms. Svetotekhnika 8 no.12:17-23 D '62.
(MIRA 16:1)

1. Leningradskiy institut okhrany truda Vsesoyuznogo
tsentral'nogo soveta professional'nykh soyuznov.
(Electric lighting--Standards)

KNORRING, G.M., ~~kand.tekhn.nauk~~; SHAYKEVICH, A.S., kand.tekhn.nauk

Concerning electric lighting norms for different industries.
Svetotekhnika 8 no.12:22-23 D '62. (MIRA 16:1)
(Electric lighting--Standards)

VOLOTSKOY, Nikolay Vasil'yevich; KNOBINS, Gleb Mikhaylovich;
RYABOV, Mikhail Sergeyevich; SHAYKEVICH, Aleksandr
Semenovich; KINZHEV, S.A., nauchn. red.; KNORRING, G.M.,
nauchn. red.

[Electrical lighting of industrial and public buildings.]
Elektricheskoe osveshcheniye promyshlennyykh i grazhd-
anskikh zdaniy. [Sovetskaya Rossiya]. Moscow, 1961.
Energia, 1961. 111 p. (Sov. Sci. Ser.)

SHAYKEVICH, F.

Simplify the computing of wages. Sots.trud no.12:129 D '58.
(MIRA 13:4)

1. Nachal'nik laboratorii organizatsii proizvodstva i truda
zavoda im. Il'icha.
(Wages--Accounting)

OZEROV, K.; SHAYKEVICH, F.

Work practice of the labor norms research laboratory in the
Il'ich Metallurgical Plant in Zhdanov. Biul. nauch. inform.;
trud i zar. plata 4 no.7:46-50 '61. (MIRA 14:8)
(Zhdanov (Stalino Province)--Steel industry--Production
standards)

PASHKOV, Petr Osipovich, prof., doktor tekhn.nauk; SHURAKOV, S.S.,
kand.tekhn.nauk, nauchnyy red.; SHAYKEYICH, I.A., red.;
KONTOROVICH, A.I., tekhn.red.

[Metal fracture] Razryv metallov. Leningrad, Gos.soiuznoe
izd-vo sudostroit.promyshl., 1960. 242 p.

(MIRA 14:3)

(Metals--Fatigue)

S7051/61/041/006/006/011
0051/0514

AUTHORS: Gorbunov, V. Ya. and Shishlovskiy, I. A.

TITLE: Phase relationships for the p- and s-
reflected light-wave as given by the **Fresnel formulae**

PERIODICAL: Optika i spektroskopiya, v.11, no.6, 1961, 750-755

TEXT: It is stated that there is disagreement in the literature about the signs in the Fresnel formulae for the p- and s-components of the electric vector of a reflected light-wave. Detailed experimental and theoretical examination of the Fresnel formulae for light reflected from glass and metals lead the present authors to the conclusion that the Fresnel formulae do in fact give the correct description of the phase change on reflection provided the phase is measured by "an observer looking against the reflected ray". The reflected wave is then found to lead the incident wave in phase. Acknowledgments are expressed to A. A. Shishlovskiy for advice and interest. There are 2 figures and 12 references: 11 Soviet-bloc and 1 non-Soviet-bloc. The English-language reference reads as follows: Ref.12: J.R.Beattie.
Card 1/2

Phase relationships for the ... 7/051/61/011/006/006/012
E032/1511

G. K. T. Conn. Phil. Mag., 46, 222, 1955.

SUBMITTED March 5, 1960



Card 2/2

BUTENIN, Nikolay Vasil'yevich; PONYRKO, S.A., nauchnyy red.;
MERKIN, D.R., doktor fiz.-matem.nauk, retsenzent; TROITSKIY,
V.A., kand.fiz.-matem.nauk, retsenzent; SHAYKEVICH, I.A.,
red.; TSAL, R.K., tekhn.red.

[Fundamentals of the theory of nonlinear vibrations] Elementy
teorii nelineinykh kolebaniy. Leningrad, Sudpromgiz, 1962.
193 p. (MIRA 15:5)

(Vibration)

VOLODIN, Boris Grigor'yevich; GANIN, Mikhail Pavlovich; DINEK, 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)

GORBAN', N.Ya.; SHAYKEVICH, I.A.

Optical properties of Ni-Cu alloys in the visible spectral region.
Opt. i spektr, 19 no.1:133-135 JI '65.

(MIRA 18:8)

ACCESSION NR: AR3010526

S/0058/63/000/009/D067/D067

SOURCE: RZh. Fizika, Abs. 9D489

AUTHORS: Gorban', M. Ya.; Shaykevich, I. A.

TITLE: Phase dependence of reflected light waves

CITED SOURCE: Visny*k Ky*yivs'k. un-tu, no. 4, 1961, ser. astron.,
fiz. ta khimiyi, vy*p. 1, 41-45

TOPIC TAGS: reflected light waves, phase dependence, connection
with propagation direction, p-component, s-component

TRANSLATION: The connection between the phase of a reflected
light wave and the coordinate system is considered. It is shown
that the phase of a light wave must always be related with the wave
propagation direction, i.e., with the wave normal, just as is done
in the determination of the left-hand or right-hand rotation of op-

Card 1/2

ACCESSION NR: AR3010526

tically active substances, left or right circular polarization of a wave, etc. This conclusion is fully confirmed by all the known optical experiments, including an experiment set up by the authors to determine the phase relations between the p- and s-components in a reflected light wave. On the other hand, if the phase of the light wave is not related with the wave propagation direction, then a whole series of contradiction arises, particularly in metal optics. Bibliography, 16 titles.

DATE ACQ: 14Oct63

SUB CODE: PH

ENCL: 00

Card 2/2