

CHVYROV, A.D.; BOVINA, Ye.S.; AMBURG, S.I.

Rapid determination of fat contents in chrome-tanned leather.
Obm.tekh.opyt. [MLP] no.27:41-43 '56. (MIRA 11:11)
(Leather--Testing)

KHIBNIK, I.N.; AMBURG, S.L.

Machine for cutting out straps and marking pipings. Obm.tekh.
opyt. [MLP] no.27:49-53 '56. (MIRA 11:11)
(Saddlery)

ARBUZOV, Semen Vasil'yevich; AMBURG, S.L., rezensent; MASLOV, I.G., redaktor;
MEDVEDEV, L.Ya., tekhnicheskii redaktor.

[Leather industry] Proizvodstvo syromiati. Moskva, Gos.nauchno-
tekhn.isd-vo lit-ry po legkoi promyshl., 1957. 170 p. (MIRA 10:11)
(Leather industry)

AMBURGER, P. G.

"Anglo-Russkii Stroitelnyi Slovarb" (English-Russian Dictionary on Civil Engineering, by P. G. Amburger, 557 pages, Moscow and Leningrad, 1951.

SO: 890159

TIKHONOV, N.G.; ZHELEZNYAKOV, A.T.; AMBURKIN, K.S.

Effect of cooling and heating cycles on the state of the contact
connections of aluminum busbars. Sbor. nauch. trud. ENII 3;
168-170 '63. (MIRA 17:4)

KHESIN, Ya.F.; GUMENNIK, A.E.; AMCHENKOVA, A.M.

Karyometric investigation on the effect of ectromelia virus
on cell cultures. Acta virol. 8 no.5:443-447 S '64.

1. Virological Laboratory, G. Dey Institute of Epidemiology
and Microbiology, U.S.S.R. Academy of Medical Sciences, Moscow;
and Chair of Virology, Central Institute for Post-graduate
Training of Physicians, Moscow.

ANDZHAPARIDZE, O.G.; KHESIN, Ya.Ye.; AMCHENKOVA, A.M.; STEPANOVA, L.G.

Study of the properties of Cynomologus monkey heart cells by
inoculation into immunized monkeys and re-explantation. Vop.
virus. 5 no.3;351-359 My-Je '60. (MIRA 13:9)

1. Moskovskiy nauchno-issledovatel'skiy institut preparatov protiv
poliomiye.lita.

(NEOPLASMS)

(VIRUSES)

ANDZHAPARIDZE, O.G.; ROZINA, E.E.; AMCHENKOVA, A.M.

Study of ribonucleic acid content of neurons of the central nervous system of the Macaca rhesus monkey in the processes of immunogenesis. Zhur.mikrobiol.epid.i immun. 32 no.1:22-28 Ja '61. (MIRA 14:6)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta virusnykh preparatov.

(NUCLEIC ACID)

(BRAIN)

(IMMUNITY)

ZASLAVSKIY, V.G.; AMCHENKOVA, A.M.

Cytochemical study of the activity of succinic dehydrogenase in explanted cells. Biul. eksp. biol. i med. 51 no.1:91-94 Ja '61.
(MIRA 14:5)

1. Iz morfologicheskoy laboratorii (zav. prof. S.Ya.Zalkind) i laboratorii patogistologii (zav. - prof. Ya.Ye.Khesin) Moskovskogo nauchno-issledovatel'skogo instituta preparatov protiv poliomyelita (dir. O.G.Andzhaparidze). Predstavlena akademikom V.N.Chernigovskim.

(TISSUE CULTURE)

(SUCCINIC DEHYDROGENASE)

ROZINA, E.E.; AMCHENKOVA, A.M.

Comparative study of the content of ribonucleic acid in the neurons of the brain and the spinal cord of rhesus monkeys in aparalytic and paralytic forms of poliomyelitis. Trudy Mosk. nauch.-issl. inst. virus. prep. 2:174-180 '61.
(MIRA 17:1)

AMCHENKOVA, A.M.

Histochemical study of proteins in the elements of the central nervous system of rhesus monkeys in intracerebral introduction of the poliomyelitis vaccine. Trudy Mosk. nauch.-issl. inst. virus. [rep. 2:181-184 '61. (MIRA 17:1)

ZASLAVSKIY, V.G.; AMCHENKOVA, A.M.

Cytochemical study of some enzymes and protein thiol groups
in the cells of tissue cultures inoculated with the polio-
myelitis virus. Trudy Mosk. nauch.-issl. inst. virus. prep. 2:
323-329 '61. (MIRA 17:1)

KHESIN, Ya.Ye.; AMCHENKOVA, A.M.; ORLOVA, T.G.

Histochemical study of a human embryonic lung in situ
and in explantation by the method of single-layer tissue
cultures. Trudy Mosk. nauch.-issl. inst. virus. prep. 2:
340-347 '61. (MIRA 17:1)

ROZINA, E.E.; AMCHENKOVA, A.M. (Moskva)

Changes in the central nervous system of monkeys following
infections with different strains of the poliomyelitis virus.
Arkh.pat. 24 no.5:57-63 '62. (MIRA 15:5)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta virusnykh
preparatov (dir. - dotsent O.G. Andzhaparidze).
(POLIOMYELITIS) (NERVOUS SYSTEM)

AMCHENKOVA, A.M.

Histochemical study of total protein in the elements of the central nervous system of health monkeys and in experimental poliomyelitis. Vop.virus. 7 no.6:675-680 N-D '62.

(MIRA 16:4)

1. Moskovskiy nauchno-issledovatel'skiy institut virusnykh preparatov, Moskva.

(NERVOUS SYSTEM)

(POLIOMYELITIS)

(PROTEINS IN THE BODY)

GENDON, Yu.Z.; AMCHENKOVA, A.M.

(Moskva)

Comparative study of the pathogenicity of infectious RNA
and native poliomyelitis virus for monkeys and mice. Arkh.
pat. 25 no.8:38-45 '63 (MIRA 1784)

1. Iz Moskovskogo nauchno-issledovatel'skogo instituta virus-
nykh preparatov.

ZORIN, A.D.; DEVY. TYKH, G.G.; DUDOROV, V. Ya.; AMEL'CHENKO, A.M.

Analysis of mixtures of some volatile inorganic hydrides by
gas-liquid partition chromatography. Zhur. neorg. khim. 9 no.11:
2526- 2531 N '64 (MIRA 18:1)

AMCHISLAVSKIY, A.

Information: Avt.transp. 41 no.11:54-58 N '63. (MIRA 16:12)

11111111111111111111
KOVDA, V.A.; ZIMOVETS, B.A.; AMCHISLAVSKAYA, A.G.

Hydrogenous accumulation of silica compounds and sesquioxides
soils of the Amur region [with summary in English]. Pochvovedenie
no.5:1-11 My '58. (MIRA 11:6)

1. Pochvennyy institut im. V.V. Dokuchayeva AN SSSR.
(Amur Valley--Minerals in soil)

MAYOROV, I.; AMCHISLAVSKIY, F.

The administration of production outside of the workshop. Sots.
trud no.9:122-127 S '57. (NLRA 10:9)

1. Direktor zavoda delitel'nykh golovok (for Mayorov).
 2. Nachal'nik proizvodstva zavoda delitel'nykh golovok (for Amchislavkiy).
- (Machine industry--Production standards)

USANOV, P.; BLOKE, V.; KABANOV, N.; MAYOROV, I.; AMCHISLAVSKIY, F.

Reduction of staff personnel is an essential matter. Sots.trud
no.3:105-126 Mr '58. (MIRA 13:3)

1. Nachal'nik otдела organizatsii proizvodstva tekhnicheskogo upravleniya Leningradskogo soveta narodnogo khozyaystva (for Usanov). 2. Direktor zavoda svetotekhnicheskikh izdeliy (for Blokh). 3. Nachal'nik otдела truda i zarplaty Pervogo gosudarstvennogo podshipnikovogo zavoda (for Kabanov). 4. Direktor Leningradskogo zavoda delitel'nykh golovok (for Mayorov). 5. Nachal'nik proizvodstva Leningradskogo zavoda delitel'nykh golovok (for Amchislavskiy).

(Leningrad--Industrial organization)

KONOVALOV, I.; ANCHISLAVSKIY, M.

Development of automotive passenger service. Avt.transp.33 no.8:
36 Ag'55. (MLRA 8:12)
(Karelia--Motorbus lines) (L'vov Province--Motorbus lines)

AMCHISLAVSKIY, M.

**Efficiency innovators of the Lvov motorbus and taxi fleet. Avt.
transp. 33 no.11:36 N '55. (MLRA 9:3)
(Lvov--Motorbuses--Maintenance and repair)**

AMCHISLAVSKIY, M.

A driver-innovator shares his experience. Avt.transp. 33 no.12:
12 D '55. (MLRA 9:3)

(Motorbus drivers)

IMCHISLAVSKIY, M.

Higher education without interrupting production. Avt.transp.34
no.5:31 Ny '56. (MIRA 9:9)
(Ivey--Transport workers)

AMCHISLAVSKIY, N.

Outstanding truck driver P. Reshetniak. Avt. transp. 34 no.7:
36 J1 '56. (MLRA 9:10)

(Reshetniak, P.)

AMCHISLAVSKIY, M.

New order on writing off automobiles and trailers. Avt. transp.
34 no.7:36 J1 '56. (MLRA 9:10)

(Mototrucks)

AMCHISLAVSKIY, M., dispatcher

Competition of highway transport workers of Lvov and Odessa.
Avt. transp. 37 no.12:7-8 D '59. (MIRA 13:3)

1. L'vovskiy avtobusnyy park.
(Highway transport workers)

AMCHISLAVSKIY, N. V.

SHLIONSKIY, Mikhail Semenovich; AMCHISLAVSKIY, Natan Veniamincovich; SLAV-
KIN, V.S., redaktor; EVANSON, I.M., tekhnicheskii redaktor

[Advanced work methods for finishing metal] Peredovye metody ra-
boty pri zashitke metalla. Moskva, Gos. nauchno-tekhn. izd-vo
literatury po cherno i tsvetnoi metallurgii, 1955. 32 p. (MLRA 8:7)
(Rolling mills)

AMCHISLAVSKIY, Natan Veniaminovich; PAVLOVSKIY, Sergey Iosifovich;
SLAVKIN, V.S., redaktor; VALOV, N.A., redaktor izdatel'stva;
VAYNSHTEYN, Fe.B., tekhnicheskiy redaktor

[Finishing and grading of metals] Otdelka i sortirovka metalla.
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi
metallurgii, 1956. 151 p. (MLRA 9:9)
(Metals--Finishing)

AMCHISLAVSKIY, N. V.

✓ Amchislavskiy, Natan V., and Sergei I. Lyubovskiy. (ed.)
Obrabotka metallov. (The Finishing of Metals)
Sp. 761. 1958. Moscow: Gosizdat, Nauchno-Tekhn.
Izdatel' Lit. Chernoi i Tsvetnoi Met.

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ANCHISLAVSKIY, Natan Veniaminovich; SLAVKIN, V.S., redaktor; GOLYATKINA, A.G.,
redaktor izdatel'stva; EVENSON, I.M., tekhnicheskii redaktor.

[The metal cutter in rolling mills; a textbook for the technical
instruction of workers] Reschik metalla v prokatnykh tsekhakh;
uchebnik dlia proizvodstvenno-tekhnicheskogo obuchenia rabochikh.
Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metal-
lurgii, 1957. 124 p. (MIRA 10:11)

(Metal cutting)

(Rolling mills)

ANCHISLAVSKIY, Natan Veniaminovich; CHUMACHENKO, T., vedushchiy redaktor;
HOVIK, A., tekhnicheskiiy redaktor.

[Handbook of finishing ferrous metals] Spravochnik po otdelke
chernykh metallov, Kiev, Gos.izd-vo tekhn.lit-ry USSR, 1957.
318 p. (MLRA 10:6)
(Steel-Standards)

AUTHORS: Anchislavskiy, N.V., Braunshteyn, R.A. and Shlionskiy, M.S.
(Engineers). 130 - 6 - 13/27

TITLE: Selection of a rational tool for pneumatic de-seaming of metal. (Podbor ratsional'nogo instrumenta dlya pnevmaticheskoy zachistki metalla).

PERIODICAL: "Metallurg" (Metallurgist), 1957, No.6, pp.25-28 (USSR).

ABSTRACT: In this article the selection of pneumatic hammers and bits for de-seaming steel before rolling is discussed. The characteristics of the eight types of pneumatic hammer at present used are tabulated and some of the numerous variations of bit form are illustrated. The effect on labour productivity of hammer power and the weight and shape of the bit are considered, the corresponding relations being shown graphically: all are seen to be important and the bit shape effect also depends on the type of steel. The effect of bit/hammer gap on the useful power of the hammer is also discussed and shown graphically. In general the authors recommend that hammers of maximal permitted power should be used: types KE-22, KE-28 and KE-32 for hand-support, knee support and heavier work, respectively. The material presented is based mainly on experiments at the Kuznetsk Metallurgical Combine.

Card 1/2

AMCHOVA, E.

The influence of acid sodium glutamate on certain
 microbes. Karel Kral and Eva Amchová (Karl, July, 1953).
 Praha, Czech. *Časopis Lékařů Českých* 92: 263-5 (1953).
 Acid sodium glutamate (I) is present as an impurity in
 numerous culture media. Its action was investigated in
 cultures of *S. aureus* and *S. streptococci*, *Escherichia coli*, *Pseudomonas*
fluorescens, *Staphylococcus aureus*, and *Candida albicans*
 and I will show an inhibition of growth at concns. from 1 to
 10%. In normal culture, the traces of I present will do no
 damage. Werner Jacobson

PRAZAK, V.;SOYKA, O.;AMCHOVA, E.

Effect of chemotherapeutic agents and antibiotics on blood coagulation.
Cesk. lek. cesk. 92 no.40:1096-1098 2 Oct 1953. (GIML 25:4)

1. Of the Third Internal Clinic (Head---Prof. J. Charvat, M.D.) and of
the First Institute of Medical Chemistry (Head--Prof. K. Kacl, M.D.),
Charles University, Prague.

Amchová, Eva

(M) ✓ Complement in pneumonia treated with penicillin and sulfonamides. Václav Pražák and Eva Amchová (III. int. klinika, Prague). *Casopis Lékařů* (Zdrav. 94, 624-8 (1956)).
Complement titers (I) in serum of pneumonia patients have been obtained by Procháška's micro-method. Penicillin caused striking but transient increase of I. Sulfonamides increased I more slowly but their effect was more prolonged.
I. M. Hall

①

Amchová-Pražáková, Eva

The estimation of free amino acids in biological material.
1. A new method for the estimation of glutamic acid in blood. Eva Amchová-Pražáková, Vlad. Marešák, Bedřich Chudela, and Kateř. Káčl (I. ústav pro chem. lékařskou, Prague). *Časopis Lékařů Českých* 94, 771-4(1955).--
Deproteinize 5 ml. venous blood by 30 ml. EtOH acidified with 2 drops concd. HCl. Repeatedly wash the filter with a total vol. of 70 ml. acidified EtOH. Add 10 ml. water, NH₃ to pH 6.5-7.0, and charcoal to the filtrate and evaporate *in vacuo* (2 mm. Hg) below 50°. Dissolve the weighed residue in 0.5 ml. 50% EtOH, filter through cotton and charcoal, and apply 0.03 ml. on paper. Repeat chromatography with BuOH-AcOH-water mixt. (4:1:5) 5 times. After ninhydrin detection (0.1% in BuOH, 60° for 20 min.) and treatment with Cu(NO₃)₂ soln., elute the glutamic acid (I) spot with 5 ml. abs. MeOH and read at 584 mμ. Construct a standard curve by using various amts. of I, standard of I run on the same paper sheet yields a correction. The mean error is ±5%. I level varies in the same individual. Preliminary results were in the range 2-3.8 mg. %
I. M. Hais

3

AMCHOVA-PRAZAKOVA - E.

✓ The importance of glutamic acid in the metabolic processes of the human organism. Eva Amchová-Pražáková (I. Ústav Chem. Lékařskou, Prague). *Časopis: Lékař Čestýh* 94, 1211-15(1955).—A review with 28 references.
J. M. Hais

med 1

AMCHOVA-PRAZAKOVA, Eva

Prague, Czechoslovakia

"Bemerkungen zur Biochemie der blutzuckersenkenden Substanzen," by Karel KACL, Jaroslav PROKES, Frantisek VOREL und Eva AMCHOVA-PRAZAKOVA, Institute fur Medizinische Chemie der Karls-Universitat in Prag (Vorstand: Prof., Dr. Karel KACL).

SOURCE: Die Naturwissenschaften, 1 Sep 56, Unclassified.

EXCERPTA MEDICA Sec 8 Vol 12/10 Neurology Oct 59

4903. THE ESTIMATION OF GLUTAMIC ACID IN THE CSF, AND ITS APPLICATION IN NEUROLOGY - Stanovení kyseliny glutamové v mozkomšním moku a aplikace v neurologii - Amchová-Pražková E. and Lesný I. I. Úst. pro Chem. Lek. a Úst. pro Chem. Soudit, Toxikol. a Mikrosk., Praha - CSL. NEUROL. 1958, 21/4 (277-280)

A newly devised technique established the normal value of glutamic acid in the CSF at 240 mg./100 ml. Thirty-eight children provided the material for the study. Values below 240 mg./100 ml. seemed to characterize acuteneurological

conditions, while higher values tended to appear in chronic CNS diseases (perinatal encephalopathies and certain tumours). The enormous value of 1,144 mg./100 ml. was found in the cystic fluid of an astrocytoma.

CZECHOSLOVAKIA/Human and Animal Physiology - Internal Secretion. T
The Pancreas.

Abs Jour : Ref Zhur Biol., No 3, 1959, 13017

Author : Kacel, K., Prokes, J., Vorel, F., Anchova-Prazakova, E.
Inst : -

Title : Influence of Synthetic Antidiabetic Agents on Glycogen
Metabolism in the Liver

Orig Pub : Casop. lekaru ceskych., 1958, 97, No 6-7, 217-220

Abstract : Mice weighing ~ 20 g were injected intraperitoneally
with insulin, nadisan (BZ-55), artosin (D-860), and
about 0.25 ml of a 40% glucose solution. The animals
were sacrificed after 1 1/2 - 2 hours, and the total gly-
cogen (TG) and labile glycogen (LG) in the liver were
determined. With injection of 25 mg/kg of BZ-55 or
D-860 the amount of TG increased 30%, but LG decreased
30 - 40%. The amount of TG decreased 50% with injection
of 750 mg/kg of BZ-55 and especially with injection of

Card 1/2

Amprosic, Franjo

Amprosic, Franjo, Department of Surgery, National Hospital (Mirska
ul. 14, Praha 1, Czechoslovakia) Chief (M.D.) Dr. Franjo AMPROSIĆ,
1957.

Recurrent adenocarcinoma of the pleural space with Pancoast-Tobias
syndrome.

Prace, Ceska Akad. za Celokupne Lekarstvo, Vol 90, No 7-8, July-Aug
1957: pp 233-237.

Abstract [English summary modified]: Recurrent adenocarcinoma of the
operative scar eroded first rib, compressed brachial plexus and stellate
ganglion in 50-year-old man. Unsuccessful recovery after surgery. Case
report, photograph, 2 roentgenograms: 4 Yugoslav, 3 western & Czech ref.

AMDUR, Z.S.

Results of working with a shortened workday. Kozh.-obuv.prom.
2 no.5:10-11 My '60. (MIRA 13:9)

1. Zaveduyushchiy normativno-issledovatel'skoy laboratorii Kali-
ninskogo kombinata iskusstvennoy kozhi.
(Hours of labor)

AMDURSKAYA, N.M.

"The Influence of small (Indicatory) Beta-ray Doses of Radio-phosphorus on the Sugar Content of Blood" p. 205, in the book Experience in the Use of Radioactive Isotopes in Medicine R. Ye. KAVETSKIY and I.T. SHEVCHENKO, publishing House of the UKRAINIAN SSR, KIEV 1955, represents medical transactions of a conference held in KIEV from 18-20 January 1954.

So: 1100235

ZHEMISNOV, G.M., kand.med.nauk; AMDURSKAYA, TS.A., kand.med.nauk

~~_____~~
Clinical aspects of the course of submucous cancers of the pharynx and of the space below the vocal cords. Trudy gos. nauch.-issl.inst.ulcha, gorla i nosa. 6:358-361 '55.

(MIRA 12:10)

1. Iz Gosudarstvennogo nauchno-issledovatel'skogo instituta ulcha, gorla i nosa i Klinicheskoy ordena Lenina bol'nitsy imeni S.P.Botkina.

(PHARYNX--CANCER)

AMEDRO, A.V.

Work practice of the Vinnitsa State Farms of the Sugar-Beet Trust.
Sakh.prom,30 no.5:56-59 ~~1956~~ '56. (MIRA 9:9)

1.Vinnitskiy sakhsvektrest.
(Vinnitsa Province--Sugar beets)

TASHMUKHAMEDOV, I.; ZAKHAROV, V.A.; KARAKOZOVA, A.A.; STEPANOVA, M.Ya.;
AMEDZHANOV, A.

Prescriptions filled at pharmacies of the therapeutic institutions
of Tashkent. Apt. delo 14 no.5:72-76 S-O '65.

(MIRA 18:11)

1. Tashkentskiy farmatsevticheskiy institut.

AMELANDOV, A.S.

DECEASED
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GEOLOGY

AMEL'CHENKO, A. M.

The Second All-Union Conference on the Preparation and Analysis of High-Purity Elements, held on 24-28 December 1963 at Gorky State University im. N. I. Lobachevskiy, was sponsored by the Institute of Chemistry of the Gorky State University, the Physicochemical and Technological Department for Inorganic Materials of the Academy of Sciences USSR, and the Gorky Section of the All-Union Chemical Society im. D. I. Mendeleev. The opening address was made by Academician N. M. Zhavoronkov. Some 90 papers were presented, among them the following:

N. V. Larin, G. G. Devyat'kh, and I. L. Agafonov — a spectrochemical — and A. D. Zorin and A. M. Amel'chenko — a chromatographic control method of Si purification by determination of extraneous volatile hydrides in monosilane.

(Zhur Anal. Khim, 19, No. 6, 1964 p. 777-79)

L 24188-65 INT(m) / EPF(c) / ENP(j) Pc-l/Pr-l FM

ACCESSION NR: AP4048303

S/0078/64/009/011/2526/2531

AUTHOR: Zorin, A. D.; Devyaty*kh, G. G.; Dudorov, V. Ya.; Amel'chenko, A. M. 8

TITLE: Analysis of mixtures of certain volatile inorganic hydrides by the gas-liquid partition chromatographic method

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 11, 1964, 2526-2531

TOPIC TAGS: gas liquid chromatography, volatile inorganic hydride, determination, quantitative analysis, silane, germane, phosphine, arsine, hydrogen sulfide, hydrogen, ethane, ethylene

ABSTRACT: Gas-liquid partition chromatographic analysis was used for the quantitative determination of mixtures of volatile inorganic hydrides of groups IV, V and VI elements of the periodic system. To obtain a suitable elutriating gas a system was worked out for cleaning nitrogen of moisture (to $7-8 \times 10^{-5}$ %) and oxygen (to 1×10^{-3} %). Al_2O_3 and diatomaceous earth of 0.25-5 mm grain size were used as carriers. The Al_2O_3 was wetted with polyethylsiloxane liquid.

Card 1/2

L 24188-65

ACCESSION NR: AP4040303

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VKZh-94B, Didecylphthalate, ethyl cellosolve, silicon oil 702C, polymethylphenyl siloxane liquid PFMS-4F, VKZh-94B, and paraffin oil were tested as solvents for the hydrides on diatomaceous earth. The sensitivity, in mg/ml³, of the chromatographic analysis of a mixture of hydrides on a column of diatomaceous earth wetted with PFMS-4F silicone oil was: silane 2.9×10^{-6} , germane 9.0×10^{-5} , phosphine 2.0×10^{-4} , arsine 4.2×10^{-4} , hydrogen sulfide 9.4×10^{-4} and hydrogen 3.5×10^{-6} . The sensitivity of the analysis on an Al₂O₃ column treated with VKZh-94B silicone oil was: silane 4.4×10^{-6} , phosphine 9.4×10^{-4} , ethane 1.0×10^{-4} , ethylene 3.1×10^{-4} , arsine 1.5×10^{-3} , and germane 6.3×10^{-5} . Orig. art. has: 5 tables and 5 figures

ASSOCIATION: None

SUBMITTED: 11Jul63

ENCL: 00

SUB CODE: IC, GC

NR REF SOV: 008

OTHER: 024

Card 2/2

DEVYATYKH, G.G.; MORIN, A.D.; AMEL'CHENKO, A.M.; LYAKHMANOV, S.B.;
YEZHELEVA, A.Ye.

Chromatographic analysis of mixtures formed by some volatile
inorganic hydrides. Dokl. AN SSSR 156 no. 5:1105-1108 Je '64.
(MIRA 17:6)

1. Nauchno-issledovatel'skiy institut khimii pri Gor'kovskom
gosudarstvennom universitete im. N.I.Lobachevskogo. Predstavleno
akademikom N.M.Zhavoronkovym.

AMEL'CHENKO, A.P., mashinist elektrovoza.

Some irregularities in the operation of rapid-acting electric locomotive switches. Elek. i tepl. tiaga 3 no.4:34-35 Ap '59.
(MIRA 12:7)

1. Depo Kuybyshev, Kuybyshevskoy dorogi.
(Electric locomotives--Electric equipment)
(Electric switchgear)

AMEL'CHENKO, A.P., mashinist elektrovoza depo Kuybyshev

How to eliminate defects of starting resistances. Elek.1
topl.tiaga 3 no.11:42-43 N '59. (MIRA 13:3)
(Electric locomotives)

SAVEL'YEV, G.P.; AMEL'CHENKO, A.P., mashinist elektrovoza

Servicing electric passenger locomotives by shift brigades.
Elek.1 tepl.tilaga 14 no.3:15-16 Mr '60. (MIRA 13:7)

1. Mashinist instruktor depo Kuybyshev (for Savel'yev).
(Electric locomotives)

AMEL'CHENKO, M.

"Control and responsibility for production quality." Sots.
trud 6 no.5:111-113 My '61. (MIRA 14:6)

1. Nachal'nik otdela truda i zarabotnoy platy upravleniya
metallurgicheskoy promyshlennosti Moskovskogo oblastnogo
sovnarkhoza.

(Moscow Province--Refractories industry--Quality control)
(Moscow Province--Steel industry--Quality control)

AMEL'CHENKO, M.

For simplifying planning and accounting for labor indices.
Sots. trud 8 no.12:123-127 D '63. (MIRA 17:2)

1. Nachal'nik otdela truda i zarabotnoy platy Upravleniya
chernoy i tsvetnoy metallurgii Moskovskogo soveta narodnogo
khozyaystva.

AMEL'CHENKO, M.

Fulfilling production norms and the task of introducing
efficient work methods. Sots. trud 6 no.7:64-72 J1 '61.
(MIRA 16:7)
(Moscow Province--Production standards)

AMEL'CHENKO, M.

Efficiency promoter's duties and role in production. Sots.trud
7 no.7:78-80 J1 '62. (MIRA 15:8)
(Moscow Province--Steel industry--Production standards)

АМЕЛ'УНСЬКУ, К. А.

Technical standards in high-grade metallurgy. Moskva, Gos. nauchno-tekhn. izd-vo
lit-ry po chernoi i tsvetnoi metallurgii 1954. 327 p. (55-28470)

TN673.A57

1. Metallurgy - Standards.

AMBL'CHENKO, M.A.

Granulation of conversion manganese slags. Biul. tekhn.-ekon. inform.
no.1:16-17 '57. (MIRA 11:4)

(Manganese---Metallurgy)

SOV/137-58-7-14264

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 45 (USSR)

AUTHOR: Amel'chenko, M.

TITLE: Eliminate Shortcomings in the Revision of Production Standards in Metallurgical Establishments (Ustranit' nedostatki v pere-smotre norm na metallurgicheskikh predpriyatiyakh)

PERIODICAL: Sots. trud, 1958, Nr 1, pp 89-93

ABSTRACT: Summing up of the work on the revision of production standards of establishments under the direction of the Office of Metallurgical Industry of the Council of People's Economy of the Moscow (Oblast') Economy Region. Important work on the revision of production standards was carried out at the "Elektrostal'" plant. About one hundred large-scale technical reorganization measures were worked out. At certain plants the review of production standards has been slowed down even after introduction of technical and organizational measures which change the labor conditions. The substitution of new production standards for the old ones is a very important and responsible field of activity at the plant. It is expedient to have the various scientific research institutions work on the preparation of

Card 1/2

SOV/137-58-7-14264

Eliminate Shortcomings in the Revision of Production Standards (cont.)

single production standards, which could then be adapted to specific plant conditions on the basis of the data of the respective establishments.

M.M.

1. Industrial production--Standards

Card 2/2

AMEL'CHENKO, M.

Problems of technical standardization in increasing labor productivity in metallurgical plants. Sots.trud 4 no.1:77-82 Ja '59.

(MIRA 12:2)

(Metallurgical plants)

(Production standards)

MIL'KOV, K.; BLOKH, V.; AMEL'CHENKO, M.

Toward a radical reorganization of management. Sots.trud
4 no.7:106-115 J1 50. (MIRA 13:4)

1. Nachal'nik otdela truda i zarabotnoy platy Karel'skogo
sovnarkhoza (for Mil'kov), 2. Direktor Moskovskogo zavoda
svetotekhnicheskikh izdeliy (for Blokh), 3. Nachal'nik otdela
truda i zarabotnoy platy Upravleniya metallurgicheskoy promy-
shlennosti.

(Industrial organization)

22(4), 25(3)

AUTHOR:

Amel'chenko, M. A.

SOV/131-59-4-13/16

TITLE:

News in Brief (Kratkiye soobshcheniya). Administrative Structure Without Departments in Works of Refractories (Bestsekhovaya struktura upravleniya na ogneupornykh zavodakh)

PERIODICAL:

Ogneupory, 1959, Nr 4, pp 189-190 (USSR)

ABSTRACT:

The Smigirevskiy and Domodedovskiy works of refractories of Mosoblsnovnarkhoz were readjusted to an administrative form without departments. The gross production of each of these plants amounted to less than 30,000,000 rubles per year, the administration, however, was organized according to the example of large works and was therefore too complicated and required many personnel. The following measures were taken: In the administration the number of subdepartments was reduced from 10 to 6, their functions partly being altered. The accounting staff in the works departments was dissolved and their duties were transferred to the bookkeeping department. The purchasing and sales departments were charged also with the booking of orders and the control of their execution, as well as the depots and transportation. All works departments with an unfinished manufacturing cycle were united in one

Card 1/3

News in Brief. Administrative Structure Without
Departments in Works of Refractories

SOV/131-59-4-13/16

production section of refractories. The maintenance was placed under the command of the leading technical engineer and the design office of the director of the repair department. Laboratory and OTK were combined. The position of the foreman was strengthened. He was appointed organizer of the production and has to utilize the reserves in order to accomplish the tasks of production. The manufacturing section was released from office work. The foreman gets only one document - the weekly manufacturing plan and projects on the basis of it the work of the shifts. He only makes the shift report which is the basis of the production register and calculation of the laborers' pay. The foreman has the decisive right in questions of organization and planning in the shift. At his disposal is a fund (3% of the pay fund) for awarding special performances. The recruitment of new workers is discussed with the foreman. The bookkeeping department makes the calculation of wages. This readjustment permitted a reduction of the administrative staff and an increase in manufacture. The readjustment is not yet regarded as terminated and requires further perfection.

Card 2/3

News in Brief. Administrative Structure Without
Departments in Works of Refractories

SOV/131-59-4-13/16

ASSOCIATION: Mosoblsovarkhoz

Card 3/3

NIKULIN, Vadim Mikhaylovich; ISKHAKOV, Galim Khanipovich; AMEL'CHENKO,
M.A., retsenzent; VESELOV, N.G., red.; KRYZHOVA, M.L., red.isd-va;
MATLYUK, N.M., tekhn.red.

[Labor productivity growth potentials in refractory materials
production] Rezervy rosta proizvoditel'nosti truda v ognepornom
proizvodstve. Sverdlovsk, Gos.nauchno-tekhn.isd-vo lit-ry po chernoi
i tsvetnoi metallurgii, Sverdlovskoe otd-nie, 1961. 85 p.
(MIRA 14:6)

(Refractories industry)

AMEL'CHENKO, M.A.

New techniques in making card wire. Biul.tekh.-okon.inform.
no.6:7-8 '61. (MIRA 14:6)

(Wire industry)

AMEL'CHENKO, M.A.

Hydraulic press with 5,000-ton capacity for press shaping of large refractory articles. *Biul.tekh.-ekon.inform.* no.10:33-36 '61.

(MIRA 14:10)

(Hydraulic presses)

AMELICHEV, B.D., aspirant

Some functional changes in the pancreas in acute surgical pathology of organs of the abdominal cavity. Trudy Khar. med. inst. no.50:144-150 '62. (MJRA 19:1)

1. Kafedra gosital'noy khirurgii (zav. - prof. T.I.Tikhonova) lechebnogo fakul'teta Khar'kovskogo meditsinskogo instituta.

AMELIN, A. G.

"Experiments on the work on vanadium catalysts in the Vladimir Works."
J. Chem. Ind. (Moscow) 1933, No. 9, 40-43.

The development of the plant is described.

AMELIN, A. G.

"The control of production of sulfuric acid by the contact method."
J. Chem. Ind., Moscow, 1934, No. 7, 41-4.

A unified control system is described.

AMELIN, A. G.

"Moscow vanadium catalysts in use." J. Chem. Ind., (Moscow) 1934, No. 11,
pp. 49-52.

Further development of the factor is described.

AMELIN, A. G.

"Calculations for the contact apparatus for preparing sulfuric acid."
J. Chem. Ind. (Moscow) 12, 380-4, 1935.

Equations are derived for the design of more efficient apparatus.

AMELIN, A. G.

"Calculations for a contact apparatus with internal heat exchange for producing sulfuric acid." J. Chem. Ind. (Moscow) 13, 20-4, 1936.

The most efficient operating conditions for such an app. are calcd.

CA

18

PROCESS AND PROPERTIES INDEX

The fog formation of sulfuric acid in the contact process.
 A. G. Amelin. *J. Chem. Ind. (Moscow)* 13, 643-7 (1930). - For slowest and most even cooling of H₂SO₄ from 350° to 140°, air cooling through metal walls should be used. A small amt. of steam should be added to the gas as it leaves the contact chamber, to prevent free SO₃ being left. After reaching 140°, the cooling should continue in a tower wet with weak H₂SO₄ or H₂O, to hasten soln. of the fog. H. M. Leicester

MATERIALS INDEX

430-55A METALLURGICAL LITERATURE CLASSIFICATION

ESSENTIAL DIVISION

SECTION

RESEARCH CENTER

RESEARCH CENTER

AMELIN, A. G.

"Appliance for analysis of aerosols." Zavod. Lab., 1938, 7, 878-879.

The gas is passed at the rate of $\times 2.1$ per min. through a glass upiral, on the walls of which the droplets are deposited by the centrifugal force developed. Complete separation of H_2SO_4 droplets from air is achieved with this device.

AMELIN, A. G.

"The condensation of sulfuric acid." J. Chem. Ind. (USSR) 17, No. 10, 14-18
1940.

The time required to condense H_2SO_4 below 270° is decreased as the condenser surface increases. Absorption of SO_2 is better at lower temp. Optimum conditions of condensation of various gas mixts. are discussed.

AMELIN, A. G. and BELYAKOV, M. I.

"Vapour pressure of selenium dioxide." J. Phys. Chem. Russ., 1944, 18, 466-468.

The v.p. P (in mm. Hg) of SeO_2 at $173-227^\circ$ is given by $\log_{10} P = 5542.5/T + 12.0267$.

7

Determination of elementary sulfur in a gas mixture.
 A. G. Amelin and Z. B. Serodastova. *Zavodskaya Lab.*
 11; 200-7 (1948). — Pass the gas sample into a (40) 500-
 mm. quartz tube (diam. 4-6 mm.) filled with loosely
 packed glass wool (3-5 g.) with a velocity of 1 l./min.
 (resistance of the glass wool should be not less than 15-
 20 mm. of Hg) so that 0.18-0.3 g. of S is accumulated,
 connect the tube with a Bunsen jar, wash the sample
 under a reduced pressure with 750-1000 ml. of hot distd.
 water to remove SO₂, SO₃, As₂O₃, and other impurities.
 Place the glass wool (contg. S) in a 250-ml. Erlenmeyer
 flask, add 50 ml. of N NaOH, and boil. Est. S from the
 tube by dipping one end into boiling NaOH, and drawing
 in the hot soln. through a rubber tubing; at the other end
 of the tube so as to dissolve all S present, cool, add 10 ml.
 of H₂O, neutral to methyl orange, let stand for 15-20
 min., and titrate excess base with N HCl. Det. S in
 g./cu. m. by the equation ($a K_1 - b K_2$) 0.016/V₀ (a the
 quantity of base taken in ml., K_1 correction to the base
 soln., b quantity of HCl used for back titration in ml.,
 K_2 correction to the acid soln., V_0 vol. of the gas passed
 under standard conditions). In the presence in the gas of
 considerable quantities of substances reacting with base,
 the soln. is boiled after oxidation with H₂O₂ and S detd.
 by the usual method. Three references. W. R. Hema

AISI-31A METALLURGICAL LITERATURE CLASSIFICATION

FROM SYNDICATE

CALIFORNIA

FROM SCHLIER

2

ABSORPTION OF SULFURIC ANHYDRIDE BY WATER SOLUTIONS OF
SULFURIC ACID. H. A. G. AMUND. *J. Applied Chem.*
(U.S.S.R.) 18, 8(6-17)(1942) (English summary); cf.
C.A. 39, 20411. The derivation of equations is presented
which express the completeness of SO₂ absorption by
H₂SO₄ solns. of less than 98.3% concn. at various temps.
The exptl. results coincide well with the calcd. The
equation, as derived, for % absorption of SO₂ is: $\beta =$
 $100[1 - (K_2 p_i / K_1 p_c) \ln \{ (K_1 p_c / K_2 p_i) + 1 \}]$, where $\beta =$
exptl. aq. vapor pressure over H₂SO₄, $K_1 =$ exptl. coeff.
of rate of evapn. of H₂O, $K_2 =$ exptl. abs. coeff. of SO₂,
 $p_i =$ initial SO₂ vapor pressure. In conditions of super-
critical temps., the equation becomes: $\beta = 100(p_c -$
 $p_c^*) / p_c$, where p_i and p_c^* are, resp., the equil. vapor
pressures of SO₂ at entrance and exit conditions, p_c is SO₂
vapor pressure at exit, α is the critical threshold of super-
satn. of H₂SO₄ vapor. O. M. Kozolapoff

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

EDMONTON LIBRARY

EDMONTON LIBRARY

1ST AND 2ND ORDER PROCESSES AND PROPERTIES INDEX 3RD AND 4TH ORDER

CA / 1

Formation of superheated steam during condensation on a surface. A. G. Amel'yan, *J. Tech. Phys. (U.S.S.R.)* 16, 1400-90(1947)(in Russian).—An expression was developed for calcn. of the pressure of the steam which is condensing in the gaseous film and of the pressure of the steam in the main stream of the gaseous mist, during condensation. An equation was proposed for calcn. of the max. degree of superheat of steam during condensation on a surface. Methods were worked out for calcn. of the pressure of steam and its degree of superheat, on condensation of steam in a tower which is being sprayed with liquid. The use of a nozzle in a tube being cooled from the outside considerably reduced the degree of superheat. An equation was developed for the condensation process of steam in a tube with a nozzle. Equations were developed for the process of condensation of steam in a tube having at its center a supplementary heating element.
B. W. Busher

ASB-ECA METALLURGICAL LITERATURE CLASSIFICATION

FROM SYMBOLS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00
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AMELIN, A. G., (Laureate of Stalin Prize, Dr. Tech. Sci.

Dissertation: "Condensation of Sulfuric Acid." Moscow Order of Lenin Chemico-
technological Inst., imeni D. I. Mendeleev, 19 Mar 47.

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

CA

2

Formation of supersaturated vapor. A. G. Amelin.
Doklady Akad. Nauk S.S.S.R. 80, 1673-6 (1947); Chem.
Zvest. 1948, 3, 843.—The formation of supersatd. vapor
by the mixing of gases that contain the vapor but are at
different temps. is explained as follows: The vapor pres-
sure of the gas mist, after mixing is an almost linear func-
tion of the temp. whereas the pressure of the satd. vapor
changes more rapidly (than linearly) with the temp. An
app. is described with which it is possible to measure the
temp. at which a cloud forms upon mixing 2 gases. With
it the crit. degree of supersatn. of H₂O vapor in filtered
air was found to be 2.57 at 41.5°. For ionized air a value
of 1.08 was found for 83°. Deta. was also made of the
supersatn. of H₂SO₄ vapor formed upon mixing a SO₂-
contg. air mist. with an initial temp. of 140, 120, and 100°
with a 2nd air mist. contg. H₂O vapor at its initial temp.
of 100, 120, and 140°. M. G. Moore —

AMELIN, A. G.

PA 78T4

USSR/Chemistry - Mixing, Of Gases
Chemistry - Mists

May/June 1948

"The Formation of Interspersion Vapor and Aerosols During the Mixing of Gases Containing Vapors of Various Temperatures," A. G. Amelin, Lab of Contact Sulfuric Acid, NIUIF, Moscow, 11 pp

"Kolloid Zhur" Vol X, No 3

Studies the case where supersaturated vapor is formed as result of the mixing of gases which contain vapors of various temperatures. Uses Mol.'s diagrams to make calculations based on the thermal and material balance. Submitted 27 Jan 1948.

78T4

USSR/Chemistry - Analysis, Photoelectric Jul 48
Chemistry - Gases, Analysis of

"Photoelectric Analysis of Gases by Mist Formation Method," A. G. Amelin, B. V. Mikhail'chuk, Inst on Fertilizers and Insectofungicides, 4 3/4 pp

"Zavod Tab" Vol XIV, No 7

PA 17/49T10

Suggests new technique for analyzing gaseous mixtures. Principle is to form aerosols in which the dispersion medium is the gaseous mixture itself and the dispersion phase, the component being determined, is transferred to less finely dispersed state by adding a new gas. Quantitative determination of a gas by changing it to misty or smoky

17/49T10

USSR/Chemistry - Analysis, Photoelectric Jul 48
(Contd)

state is of great practical importance, as very small quantities of mist or smoke can be detected with comparatively simple optical apparatus. Describes preliminary experiments in detail.

AMELIN, A. G.

17/49T10

AMELIN, A.G.

DOC. TECH SCI.

Dissertation: "Condensation of Sulfuric Acid."

11 May 49

Moscow Order of Lenin Chemico-technological Inst imeni D.I. Mendeleev.

80 Vecheryaya Moskva
Sum 71

AMELIN, A. G.

USSR/Physics - Water Vapor

Oct 49

"Formation of Supersaturated Vapor When the Vapor is Condensed on a Surface, II," A. G. Amelin, Sci Inst on Fertilizers and Insectofungicides, 10 pp

"Zhur Tekh Fiz" Vol XIX, No 10 p. 1136-45

151T104

Obtained equations which permit vapor supersaturation to be determined and thus established possibility of fog formation when vapor is condensed on a surface. Showed that vapor saturation as a function of temperature may have a maximum. Obtained an equation to determine temperature at which maximum vapor saturation is created when vapor condenses on a surface. Confirmed correctness of equations by results of

151T104

USSR/Physics - Water Vapor (Contd)

Oct 49

experiments in condensing water vapors in a pipe cooled from the outer surface. Submitted 17 May 48.

151T104

CA

6

Properties of nitroperoxyacetic acid. A. G. Amelin and Z. B. Burdastova. *Zhur. Priklad. Khim.* (J. Applied Chem.) 22, 928-37 (1949).—The acid $\text{HO}_2\text{SOSO}_2\text{NO}_2$, obtained by pouring SO_3 and HNO_3 into a cooled beaker, with const. stirring, the temp. not being allowed to rise above 40° , and purified by repeated recrystn. m. 106.5° , $d_4^{20} = 2.1788$. The system H_2SO_4 - $\text{HO}_2\text{SOSO}_2\text{NO}_2$ has a eutectic point at 60.66 wt. % $(\text{SO}_4)_2\text{HNO}_2$, m. -16.5° , freezing -34° . Densities and viscosities were detd. for 10 solns. of the compns. (wt. % SO_4 , N_2O_5 , H_2O): (I) 80.66, 5.85, 16.90; (II) 78.88, 6.16, 15.91; (III) 76.77, 12.13, 11.10; (IV) 84.24, 2.88, 13.13; (V) 82.71, 5.02, 12.27; (VI) 79.38, 11.85, 8.77; (VII) 90.61, 2.71, 6.68; (VIII) 88.68, 5.11, 6.31; (IX) 82.09, 11.44, 5.57; (X) 86.05, 11.22, 5.82. For solns. I, II, V-X, the d_4^{20} is 1.8549, 1.8723, 1.9190, 1.9390, 1.9957, 2.0343, 2.0371, 2.0526, 2.0800, and at 80° , 1.8282, 1.8446, 1.8365, 1.9075, 1.9600, 1.9769, 1.9950, 2.0174, 2.0382. The viscosities at 20° are 35.5, 36.4, 52.9, 68.8, 27.5, 138.7, 221.5, 742.5, 880.0, and at 80° , 13.4, 13.8, 17.7, 21.3, 5.03, 20.2, 39.5, 102.9, 185.3. For solns. VII-X, the total vapor pressures are, at 20° , 61.5, 35.5, 4.80, at 60° , 331, 149.5, 396, and at 70° , 700, —, 147, 887 mm. Hg. Vapor pressures of oleum, at 20° , 58.9, 31.5, —, 25.2, at 50° , 502.3, 167.3, 34.9, 144.5, and at 70° , —, —, 99, 404.2 mm. Hg. N. Thon

Amelin, A. G.

U S S R

The mechanism of the formation of mist of sulfuric acid in the manufacture of sulfuric acid according to the method which uses nitrogen oxides. A. G. Amelin and A. I. Baranova. *Zhur. Priklad. Khim.* 22, 1950, 300-309.

Water pressures were measured along the full height of a Glover tower during ordinary runs and when the oil of vitriol (from H_2SO_4) was drained out of the tower. The data of the supersat. and the crit. super saturation were regd. by the relations between pressure, temp., diffusion coeff., and condensation surfaces as derived by Amelin (*Zhur. Fiz. Khim.* 19, No. 10 (1943)). Seven towers, having vols. of 17, 77, 50, 59, 10, 60, and 87 cu. m., tested, showed available condensation surfaces of 647, 2450, 1849, 1720, 1730, 1580, and 1430 sq. m., and the mist contained in the gases, after having passed each tower, was 14-24, 40.0, 29.1, 13.2, 7.0, 6.3, and 5.2 g./cu. m.; the gases entered in the tower 10, 41, 31, 28, 23, 33, and 21 sec., resp. From these measurements the following conclusions were drawn. The H_2SO_4 mist formed in the Glover tower during condensation of the H_2SO_4 vapor, as this acid is in the circulating gases on the surface of the brickwork. If the amt. of acid sprinkled into the Glover tower was decreased, it occurred when the crude oil of vitriol was removed, the temp. and the concn. of the acid in the tower mist, leading to a decrease in the concn. of the mist in the gases behind the Glover tower. The concn. of acid in the mist particles was higher than the concn. of the acid fed into the nozzles of the tower. The transformation of the SO_3 took place on the surface of the mist particles, therefore during the reaction, the no. of mist particles and the concn. of the mist should be increased in the first towers where the process of acid formation takes place. Werner Jacobson

CA

2

Theory of the process of separation of vapor by freezing out. A. G. Anzlin and Z. N. Borodastova (Inst. Fertilizers, Insecticides & Fungicides, Moscow), *Zhur. Fiz. Khim.* 26, 829-33 (1950); *U.S.S.R. Zhur. Tekh. Fiz.* 19, 1130 (1949); *C.A.* 43, 777d. — When a vapor passes through a cold trap, it can either be condensed on the walls or form an aerosol that is not held back by the trap. The theory shows that the amt. of aerosol is greater the lower the temp. of the trap. E.g., air + EtOH (15 mm. Hg) forms no aerosol above -33° , but 70% of the EtOH escapes as aerosol at -40° . The few expts. made agreed with this conclusion. The higher the vapor content of the ingoing gas, the higher the temp. at which aerosol formation starts. Vapor should be passed through a series of traps, each following trap being colder than the previous one.
J. J. Bikerman

AMELIN, A. G.

(Theoretical Principles of Fog Formation in Chemical Industries), Goskhimizdat, Moscow, 1951.

AMPLIN, A. G.

PA 192713

USSR/Biology (Agriculture) - Aug 51
Poisonous Chemicals

"Concerning the Application of Poisonous Chemicals
in the Form of Aerosols," A. G. Amelin, Dr Tech
Sci, Sci Res Inst of Fertilizers and Insectofung-
cides

"Doklady v-s Ak Selkhoz Nauk" Vol XVI, No 8,
pp 34-38

On the basis of a math treatment of the subject,
arrives at the most efficient conditions of treat-
ing fields, forests, etc., with liquid aerosols.
Concludes that if a sufficient quantity of the

USSR/Biology (Agriculture) - 192713
Poisonous Chemicals (Contd) Aug 51

poisonous chem is to be deposited per unit of
area, use of an aerosol cloud consisting of drop-
lets smaller than 30 microns in diam is inadvis-
able, because the droplets will be carried away
too far from the generator. Treatment of large
areas should be carried out at night or in the
morning, when there is a wind of 1 m/sec.

Translation - W-23276, 14 Dec 52

192713

Chem. Abstracts
1951

Viscosity of sulfur trioxide. A. O. Arslan, V. V. Ilarionov, and Z. B. Borodastova (Sci. Inst. Fertilizers Pesticides, Moscow). *Zhur. Fiz. Khim.* 25, 842-4(1951).— Since earlier data (Luchinskii, *C.A.* 33, 4812^g) were obtained with SO₃ of unknown purity, the dynamic viscosity of highly pure SO₃ was measured in a Lewis-type viscometer between 18.1 and 49.6°. The data fit the equation (least squares): $\log \eta$ (centipoise) = $-3.06511 - (450.8638/T) + (306540/T^2)$ with T in degrees abs. The activation energy for viscous flow $\epsilon = 7318 - 36.365 T + 0.0091 T^2$ in cal./mole decreases with temp. as a result of a shift of the equilibrium $(Mn) \rightarrow S(Mn)$.
Michel Mandart

ANSELIN, A. G.

331.31 : 331.32

662). The formation of radiation clouds. *Dokl. Akad. Nauk, SSSR, 77* (No. 2) 249-52 (1971) In Russian.

Theoretical. In order to forecast the possibility of formation of a radiation cloud and the time of its formation, it is necessary to solve the equation $S(x) = p(x) \exp(-\gamma x) - T(x)$, where S is the supersaturation; p the vapour pressure in the air; γ the time; x the distance from the ground; T the absolute temp. and C and F coeffs. If turbulent diffusion is neglected then the process of the transfer of the mass of air (vapour condensation) and the heat transfer near the ground can be expressed by $\partial p/\partial x = -D \partial^2 p/\partial x^2$ and $\partial T/\partial x = -a \partial^2 T/\partial x^2$ respectively, where D is the diffusion coeff. and a the coeff. of temp. conductivity of the air. A solution of these equations in the form

$$T(x,0) = T_0 \exp\left\{-\left(1 + \frac{a^2}{4D}\right) \left[1 + \phi\left(\frac{x}{\sqrt{a}}\right)\right] \frac{x}{\sqrt{a}}\right\}$$

is obtained where ϕz is a transcendental Kramp function $z = x/\sqrt{a}$. The divergence between practical results and those calc. from this equation is probably due to neglect of factors such as the presence of condensation nuclei in the air and turbulent diffusion.

W. 111x-015