KOCHESHKOV, Aleksandr Anatol'yevich; ZHELTOV, Yuriy Vasil'yevich; TOSUNOV, Eduard Mikhaylovich; ANGELOPULO, Oleg Konstantinovic; KOVALEV, A.G., vneshniy red.; MAKLAKOVA, L.F., ved. red.; YAKOVLEVA, Z.I., tekhn. red.

[Practices in well completion in the United States] Opyt zakanchivaniia skvashin v SShA. Moskva, Gostoptekhizdat, 1962. 171 p. (MIRA 16:2)
(United States—Oil fields—Production methods)

VEZIROV, D.Sh. (Moskva); KOCHESHKOV, A.A. (Moskva)

Experimental investigation of the mechanism of oil recovery of fissured porous collectors in flooding. Izv. AN SSSR, Mekh. i mashinostr. no.6:87-90 N-D '63. (MIRA 17:1)

BOKSERMAN, A.A.; ZHELTOV, Yu.P.; KOCHESHKOV, A.A.

Motion of immiscible liquids in a fissured porous medium. Dokl. AN SSSR 155 no.6:1282-1285 Ap '64. (MIRA 17:4)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut. Predstavleno akademikom S.A.Khristianovichem.

VEZIROV, D.Sh. (Moskva); KOCHESHKOV, A.A. (Moskva); KODZHAYEV, Sh.Ya. (Moskva)

Some characteristics of the flooding mechanism of fractured porous reservoir rocks. Izv. AN SSSR. Mekh. i mashinostr. no. 2:183-186 Mr-Ap '64. (MIRA 17:5)

VEZIROV, D.Sh.; KOVALEV, A.G.; KOCHESHKOV, A.A.

Determining the petroleum yield of fractured reservoir rocks. Nauch.-tekh. sbor. po dob. nefti no.21:42-47 '63. (MIRA 17:5)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

VEZIROV, D. Sh; KUVSHINOV, A.G.; KOCHERGIN, A.A.

Experimental investigation of the process of petroleum recovery from fractured reservoir rocks in dissolved gas drive. [Trudy] VNII no.40:3-14 '63 (MIRA 17:7)

VEZIROV, D.Sh.; KOCHESHKOV, A.A.

Factors determining the flowing of fractured-porous reservoir rocks. Nauch.-tekh. sbor. po dob. nefti no.25:47-50 '64.
(MIRA 17:12)

1. Vsesoyuznyy neftegazovyy nauchno-issledovatel'skiy institut.

KOVALEV, A.G.; VEZIROV, D.Sh.; KOCHESHKOV, A.A.

Estimating the oil yield of fractured reservoirs exploited under conditions of solution gas drive (according to the data of experiments on models). Trudy VNII no.42:3-14 '65.
(MIRA 18:5)

VEZ HOV, D.Sh.; KOCHEŠHKOV, A.A.

Some problems concerning the oil yield of fractured-porous reservoir rocks in case of flooding. Trudy VNII no.42:15-29 '65. (MIRA 18:5)

KOVALEV, A.G.; KOCHESHKOV, A.A.; POSTNIKOV, V.G.

Some problems concerning the present-day status of geology and the development of fractured oil reservoir rocks (digest of foreign literature). Trudy VNII no.42:362-376 '65.
(MIRA 18:5)

KOCHERGIN, A.; IVANISHVA, N.A.; UDALOV, I., red.

[Agricultural practices in growing large crops; from the practices of Yur'ev-Pol'skiy State Variety Testing Station in Vladimir Province] Agrotekhnika vysokikh urozhaev; iz opyta IUr'ev-Pol'skogo gosudarstvennogo sortoispytatel'nogo uchastka Vladimirskoi oblasti. Vladimir, Verkhne-Volzhskoe knizhnoe izd-vo, 1965. 27 p. (MIRA 18:10)

KOCHESHKOV, K.

Reconditioning bronze bush bearings. Stroitel' no.2:11 F '58.
(MIRA 11:2)
(Bearings (Machinery))

ACC NR: AP7005108 SOURCE CODE: UR/0079/66/036/009/1690/1693

OLUSHKOVA, V. P., KOCHESHKOV, K. A.

"Salts of the Organic Acids of Trivalent Thallium"

Moscow, Zhurnal Obshchey Khimii, Vol 36, No 9, 66, pp 1690-1693

Abstract: These salts are used as starting substances for the synthesis of organothallium compounds or in exchange reactions with organomercuric compounds. The authors synthesized for the first time the following organic acid salts of trivalent thallium: thallium triisobutyrate, thallium tripropionate, thallium tri-n.caprylate, and thallium tribenzoate. The first two compounds were obtained by dissolving thallium trioxide Tl_2O_3 in boiling isobutyric and propionic acids respectively, while thallium tri-n.caprylate and tribenzoate were obtained by reacetylation. All of these salts hydrolyze in air but are quite stable when stored over phosphorus pentoxide. Their melting points are fairly high (119-179.5°C) but they are lower than the melting points of the corresponding organic acid salts of monovalent thallium. When treated with hydrazine hydrate, the salts of trivalent thallium are reduced to salts of monovalent thallium of the corresponding acid. [JPRS: 38,970]

ORG: none

TOPIC TAGS: thallium compound, organometallic compound, organomercury compound

SUB CODE: 07 / SUBM DATE: 01Jul65 / ORIG REF: 002 / OTH REF: 002

Card 1/1 UDC: 546.683 + 547.13

L 36855-66 EWT(d)/EWT(m)/EWP(l)/EWP(t)/ETI IJP(c) 00/BB/JD

ACC NR: AP6023424 SOURCE CODE: UR/0139/66/000/003/0169/0173

71
68
B

AUTHOR: Belous, M. V.; Kocheshkov, V. P.; Permyakov, V. C.

ORG: Kiev Politechnical Institute (Kiyevskiy politekhnicheskiy institut)

TITLE: Compact machine for producing thin-film elements

SOURCE: IVUZ. Fizika, no. 3, 1966, 169-173

TOPIC TAGS: microelectric thin film, semiconducting film, metal deposition, metal film, physics laboratory instrument

ABSTRACT: A relatively simple and compact machine for producing thin-film elements is described. This machine makes it possible to obtain thin metallic or semiconductor films by vaporization in a vacuum, to control the electric resistance of metallic films, to deposit protective coatings on thin films, and to effect the thermal processing of thin films in a vacuum. In the proposed machine (see Fig. 1), the cylindrical housing (height, 160 mm; inner diameter, 80 mm) is attached directly to an oil-vapor pump. The film-producing section is mounted on current-carrying supports passing through the cover of the cylinder. The clamps of the conical vaporizer, which is made of tungsten wire 0.5—0.8 mm in diameter, are attached to these supports. A metallic plate (72 x 30 x 3 mm) positioned horizontally above the vaporizer, has a rectangular depression containing a heater. A mica or glass substrate on which the thin film is deposited is pressed against this heater. The shape of the thin-film elements

Card 1/3

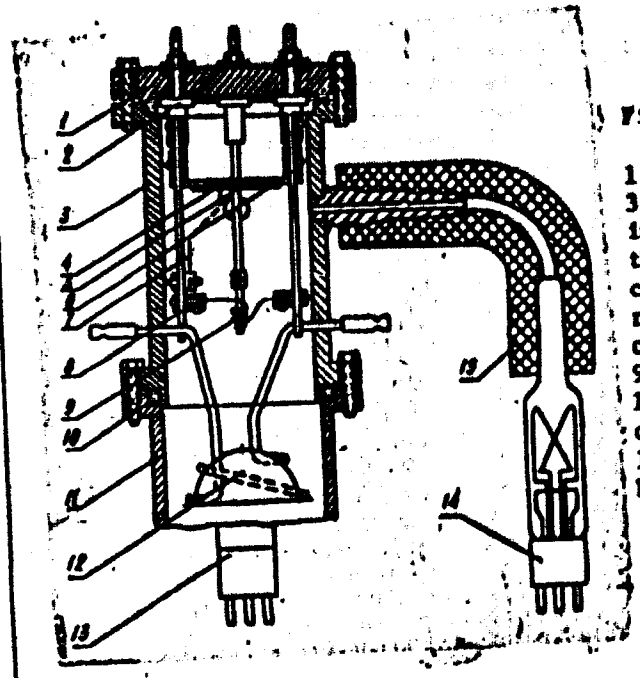

Fig. 1. Schematic drawing of the machine

1 - Cover; 2 - current carrier (support); 3 - housing; 4 - substrate heater; 5 - insulating spacer; 6 - substrate on which thin films are deposited; 7 - current carrier in the circuit for measuring the resistance of thin films; 8 - current carrier (holder) in the vaporizer circuit; 9 - tungsten vaporizer; 10 - rubber spacer; 11 - oil-vapor pump housing; 12 - cooled oil seal; 13 - VIM-2 pressure gage tube; 14 - LT-2 pressure gage tube; 15 - vacuum hose.

CA

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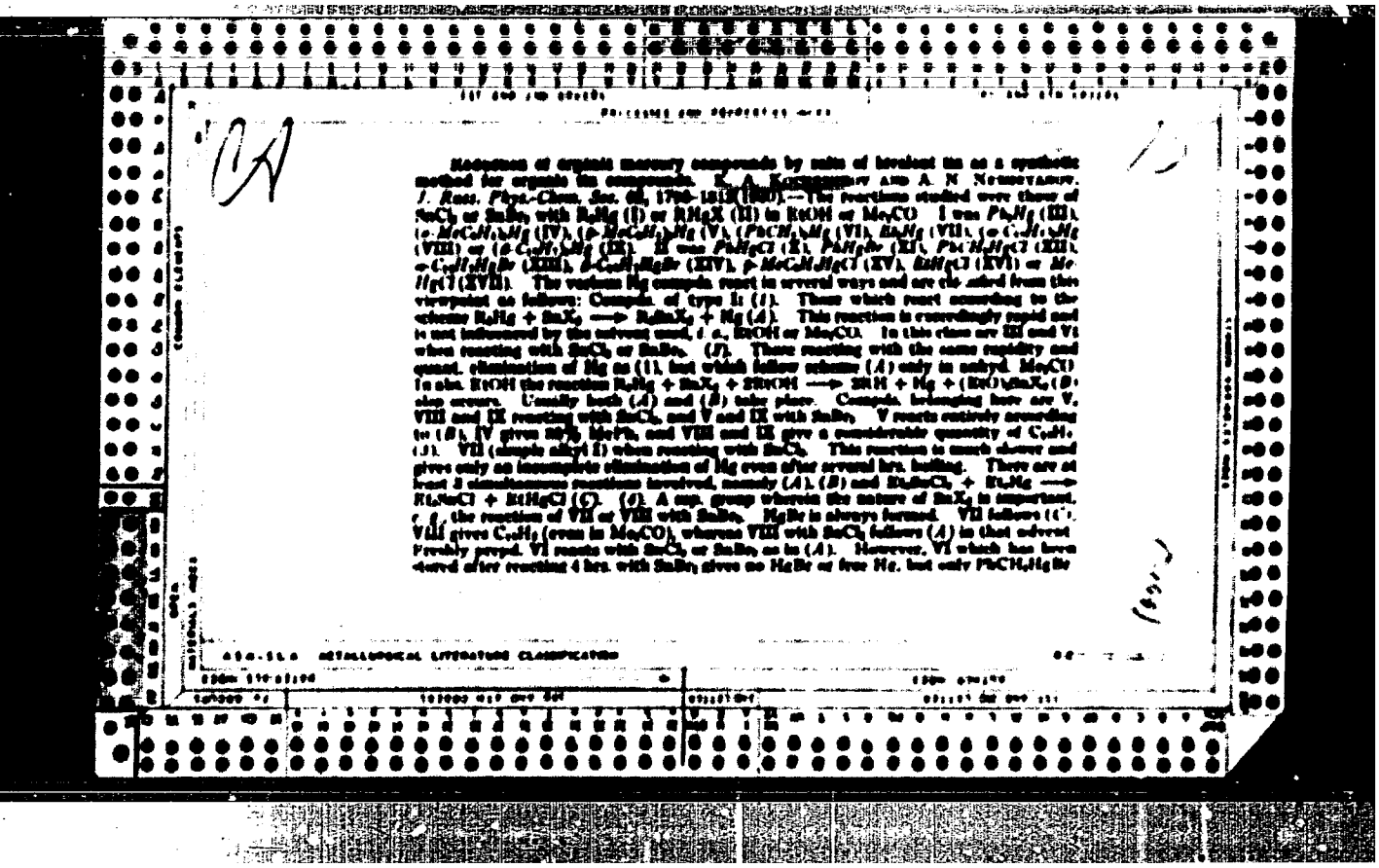
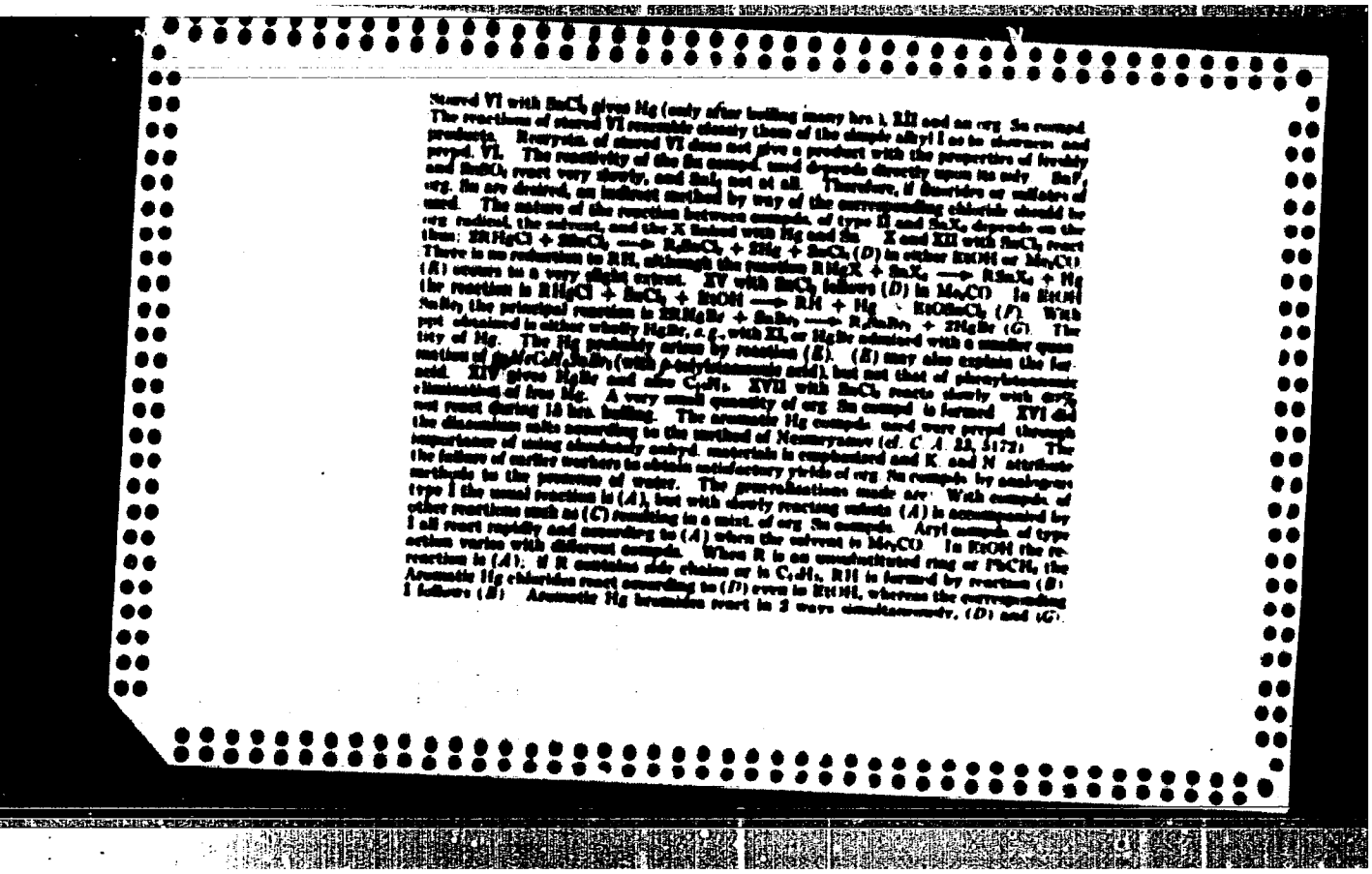
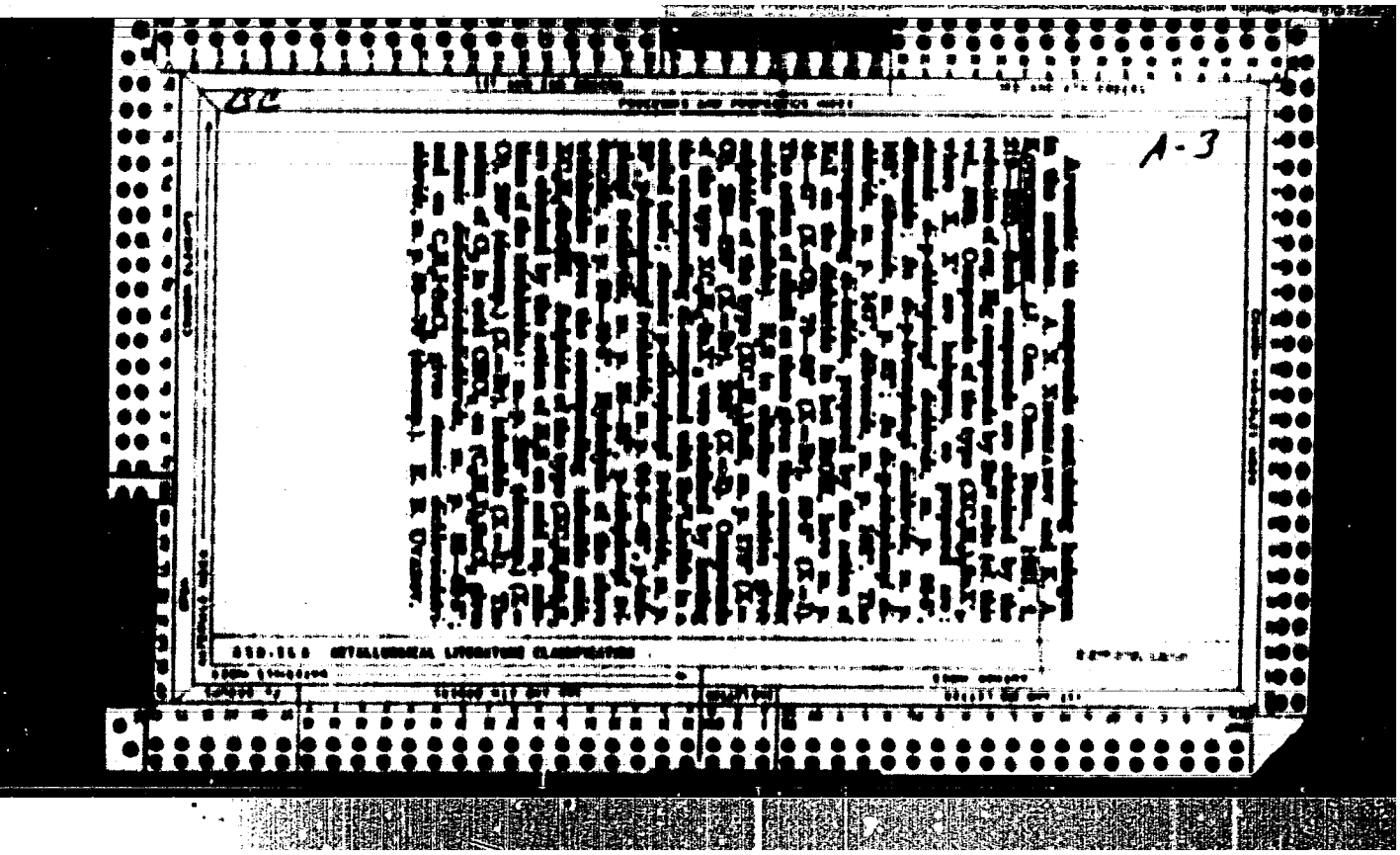
PROCESSES & PROPERTIES INDEX

A new type of the simplest aromatic compounds of tin. [illegible] (J. Russ. Phys. Chem. Soc. 61, [illegible] (1929)). New aromatic derivs. of Sn of the formula $ArSnHal_3$, corresponding to the known fatty compds. of the type $RSnHal_3$, are here described. *Phenyltin trichloride*, $PhSnCl_3$ (I) was prepd. when 43.7 g (0.1 mol.) of $(C_6H_5)_4Sn$ (II) (Pfeiffer, *Ber.* 37, 319(1904)) and 78.2 g (0.3 mol.) of freshly distd. $SnCl_4$ were heated for 1.5-2 hrs. at 210-20° in a sealed glass tube, the fraction b. 142.8° is pure I (yield [illegible]%), transparent, colorless fuming liquid, b. [illegible] in air, EtOH, and in cold H_2O without decompn. NH_3 gives ppt. of amorphous [illegible], alkalies give a ppt. sol. in excess of alkali, boiling concd. HCl gives C_6H_6 and $SnCl_4$; the action of dry NH_3, C_5H_5N and other bases on I in dry Et_2O produces the corresponding mol. compds. The fraction b. 143-240° is a mixt. of I and Ph_2SnCl_2 (III), while the residue left in the distn. flask is pure III, which was obtained in nearly theoretical yield by heating 43.7 g. (0.1 mol.) of II with 26.06 g (0.1 mol.) of $SnCl_4$ in a sealed glass tube for 1 hr., recrystd. from petroleum ether, m. 42°. I was obtained from III in [illegible]% yield by heating 34.4 g (0.1 mol.) of III with 26.06 g (0.1 mol.) of $SnCl_4$ in a sealed glass tube for 1 hr. at 220°. *Phenyltin tribromide*, $C_6H_5SnBr_3$, was obtained in 14.7-g yield by pptg. twice a cooled soln. of 23.6 g of I with an excess of HBr, the oil layer is extd. with Et_2O dried with fused $CaBr_2$, and distd., b. 182.3° and gives reactions analogous to those of I described above. By mixing 23.6 g of I with 20 cc. of III there is formed a heavy oil layer, which is assumed to be [illegible], but was not isolated as it is entirely unstable. Chas. [illegible]

METALLURGICAL LITERATURE CLASSIFICATION





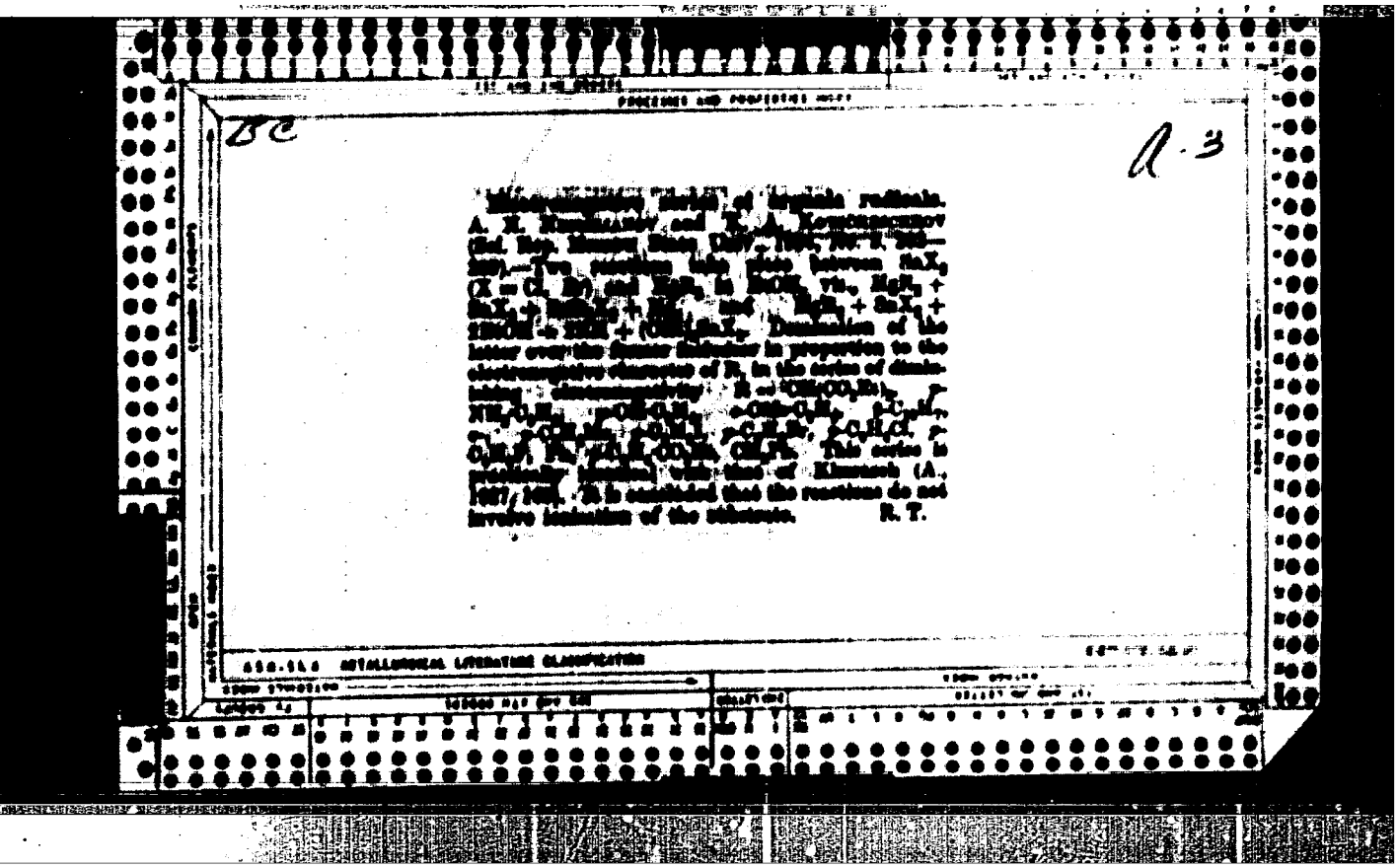


PROCESSES AND PROPERTIES INDEX

Ca

Organic compounds of germanium, tin and lead. K. A. [illegible].—*Uspekhi Khim.* 3, 85-113(1934).—A complete review of the synthesis and reactions, as with other compds., decompn. to give free radicals, reduction, etc., of various types of org. compds. and of their phys. properties, including optical isomerism and resolution. F. H. R.

METALLURGICAL LITERATURE CLASSIFICATION



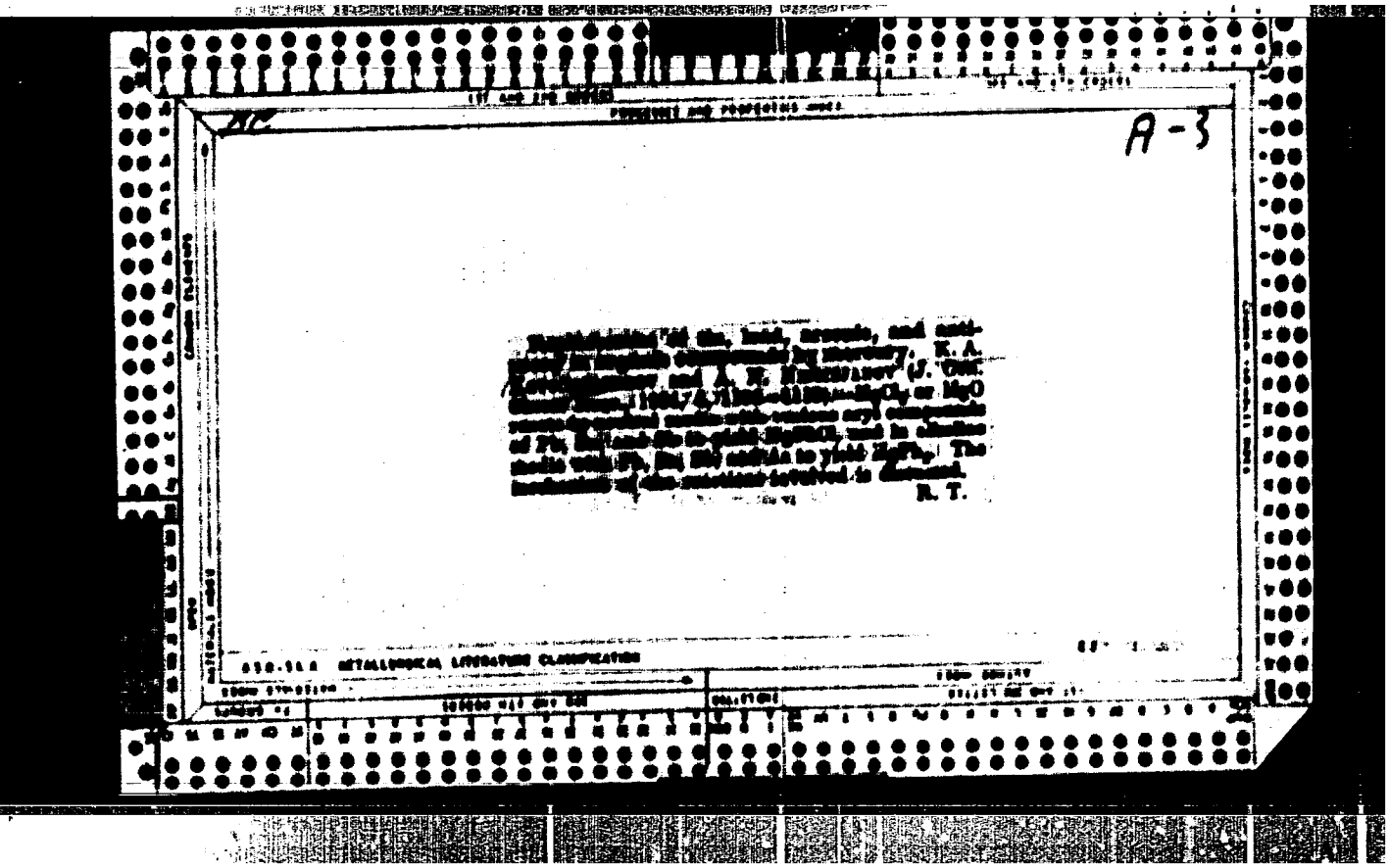
R. T.

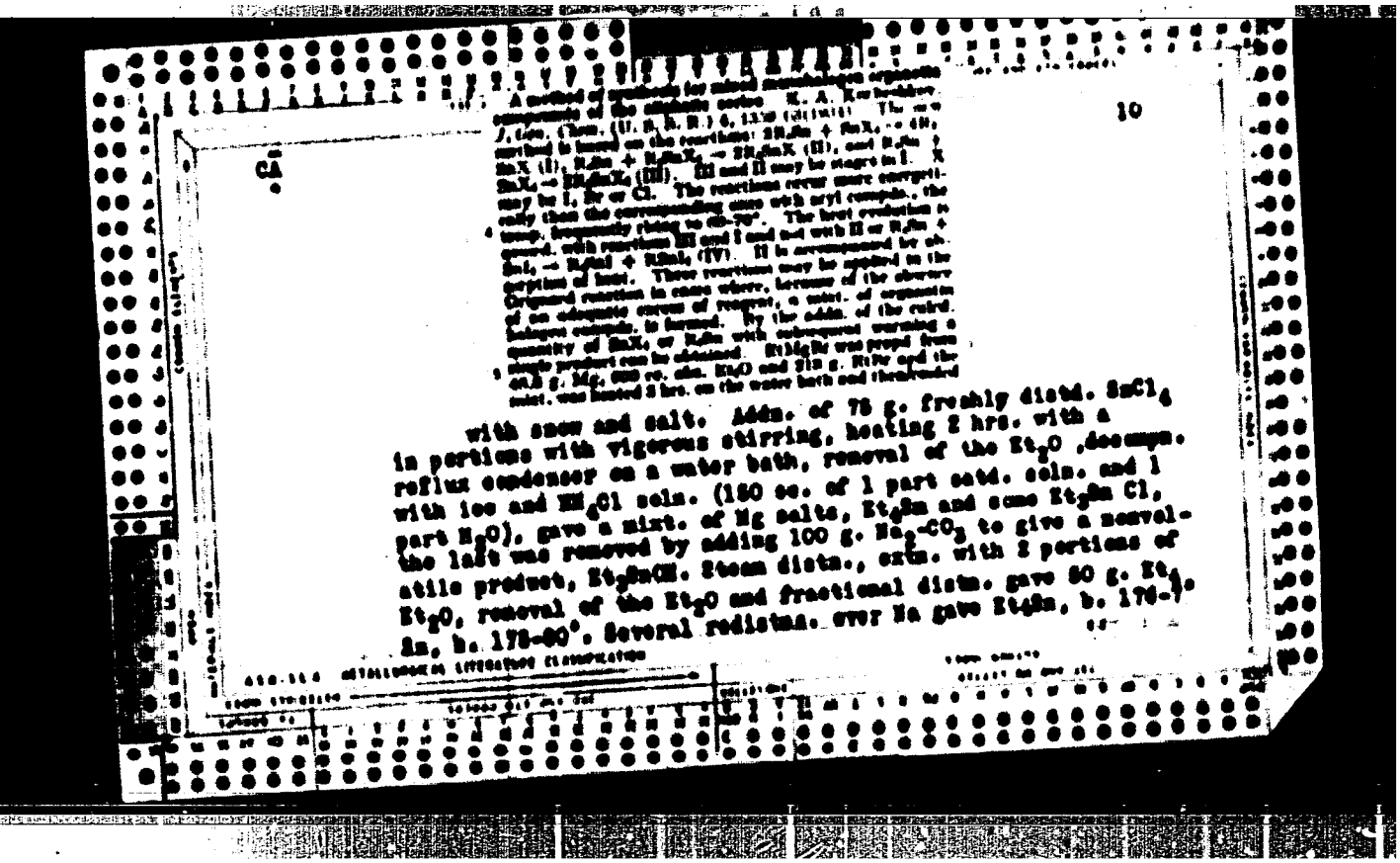
CA 10

PROCESSES AND PROPERTIES INDEX

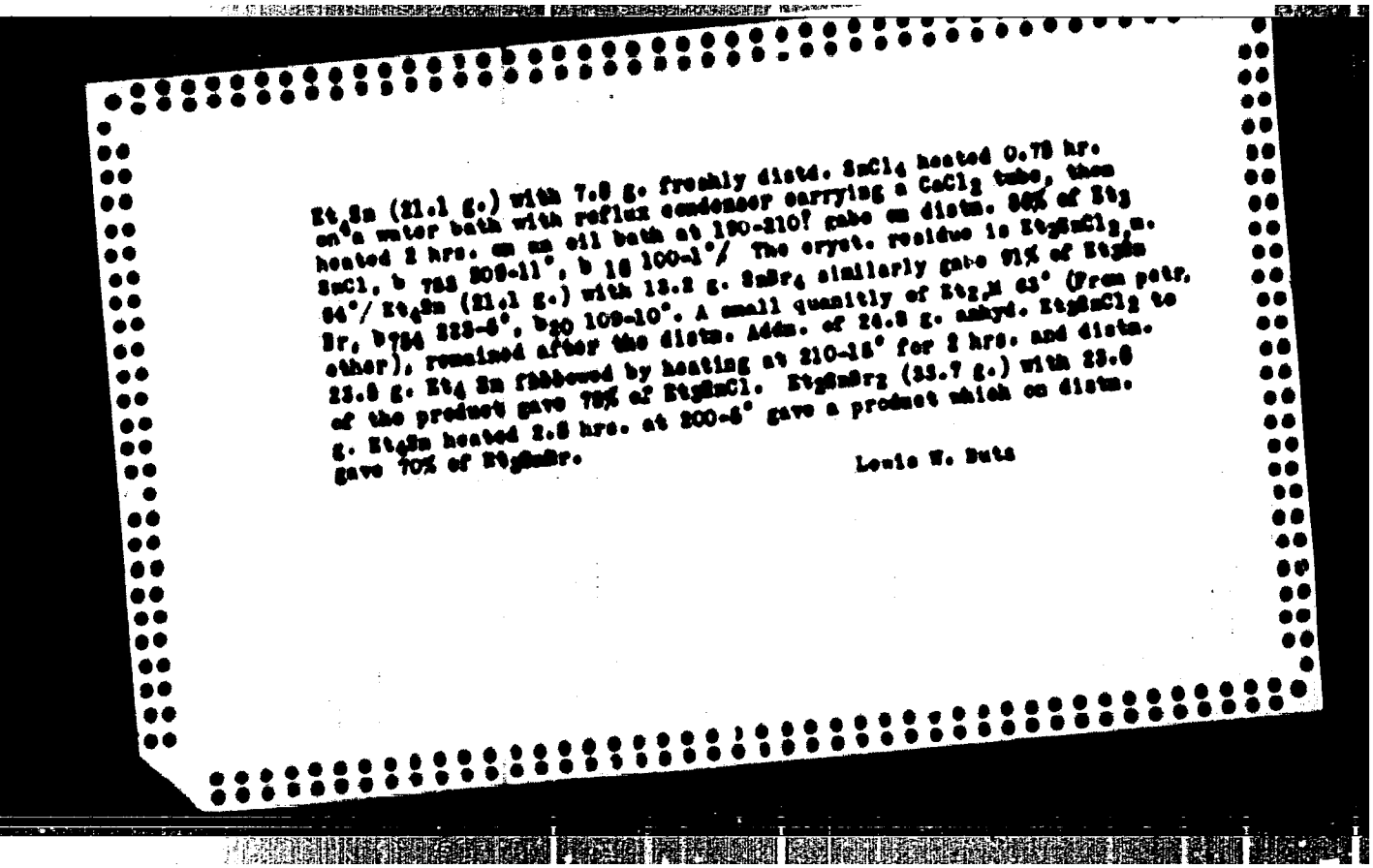
Phenomena of complex formation and halochromy in the series of the organic compounds of tin. K. A. Kocheshkov. [illegible] (Trud. [illegible] Moskov. [illegible]) J. [illegible] (1936); Chem. Zentr. 1936, II, [illegible]; cf. C. A. 30, 4711[4]. — While tetraalkyltins, SnR_4, form no complexes with pyridine (I) and trialkyltins give, on the other hand, intermolecular complexes, e. g., $[Me_3SnPy]Cl$ (cf. Kraus and Greer, C. A. 18, 2001), complexes of mono- and dialkylstannic halides of the formulas $RSnX_3 \cdot Py_2$ and $R_2SnX_2 \cdot Py_2$ can be represented with the coördination no. 6 for the Sn in the sense of Pfeiffer's system. Diphenyltin dichloride and diphenyltin dibromide give unstable complexes of the formulas $Ph_2SnCl_2 \cdot Py_2$ and $Ph_2SnBr_2 \cdot Py_2$. Still more unstable are the complexes of the triarylstannic halides with I. Tetraaryltins do not add I. Aryltrichlorotins with I give complexes of the type $ArSnX_3 \cdot Py_2$, which therefore represent addn. compds. Studies were carried out to det. whether organotin halides, like $SnCl_4$, are able to form halochromic compds. with triphenylchloromethane (II). It was found that only aryltrichlorotins, as $PhSnCl_3$ and [illegible], as p-$C_6H_4SnCl_3$, yield brown yellow compds. with II. The following formula is ascribed to such compds. by Dilthey: $[Ph_3C]SnCl_5 \cdot Ph$. Exptl. data: $MeSnCl_3 \cdot Py_2$ is unstable. $MeSnBr_3 \cdot Py_2$ m. about [illegible]°. $Et_2SnCl_2 \cdot Py_2$ m. 140°. $Me_2SnCl_2 \cdot Py_2$ m. about 162°. $Me_2SnBr_2 \cdot Py_2$ m. about 172°. $Ph_2SnBr_2 \cdot Py_2$ m. 128°. The compds. $PhSnCl_3 \cdot Py_2$, p-$C_6H_4SnCl_3 \cdot Py_2$ and o-C_6H_4Sn-$Cl_3 \cdot Py_2$ showed no m. p. W. A. Moore

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION



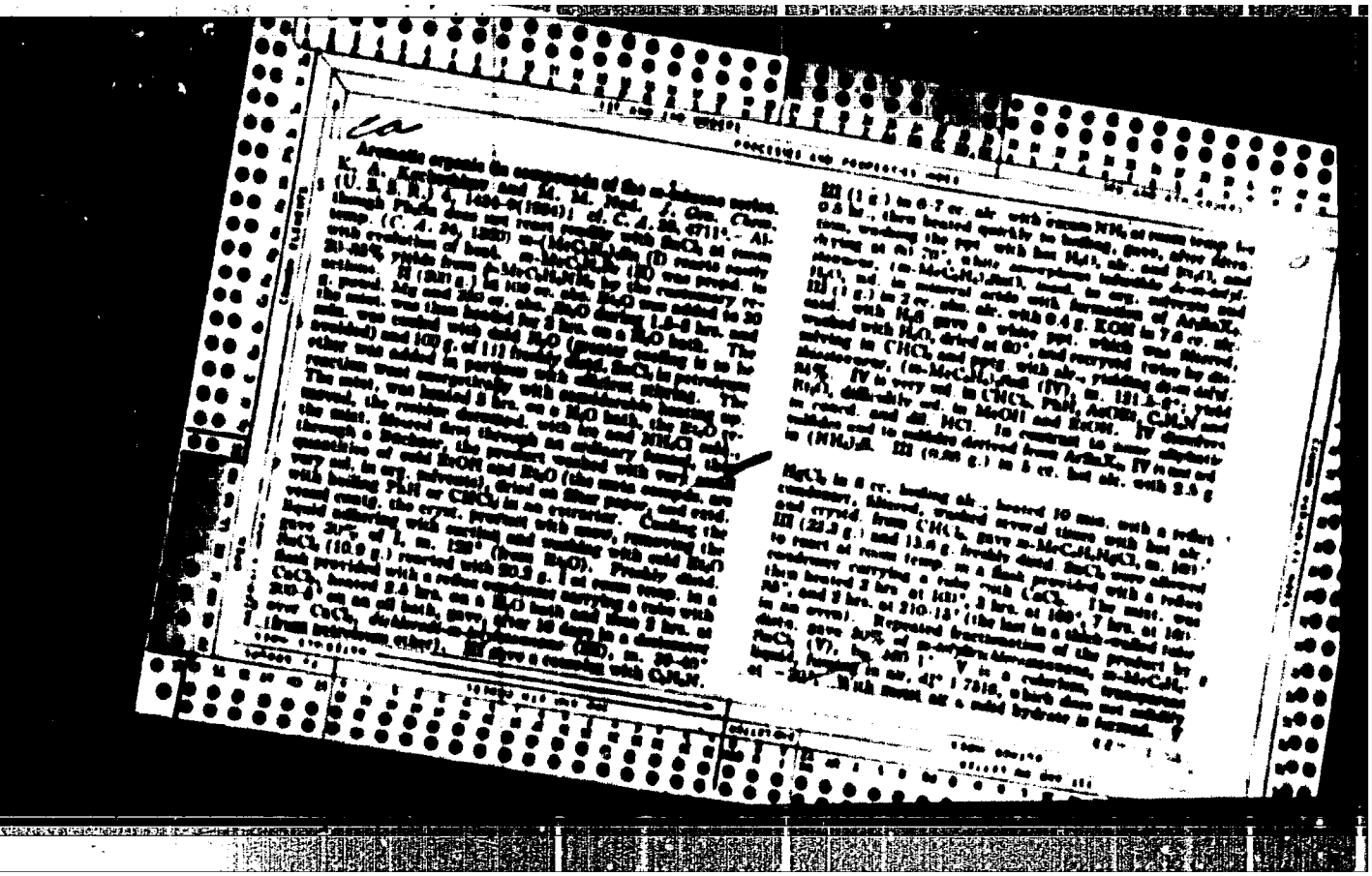


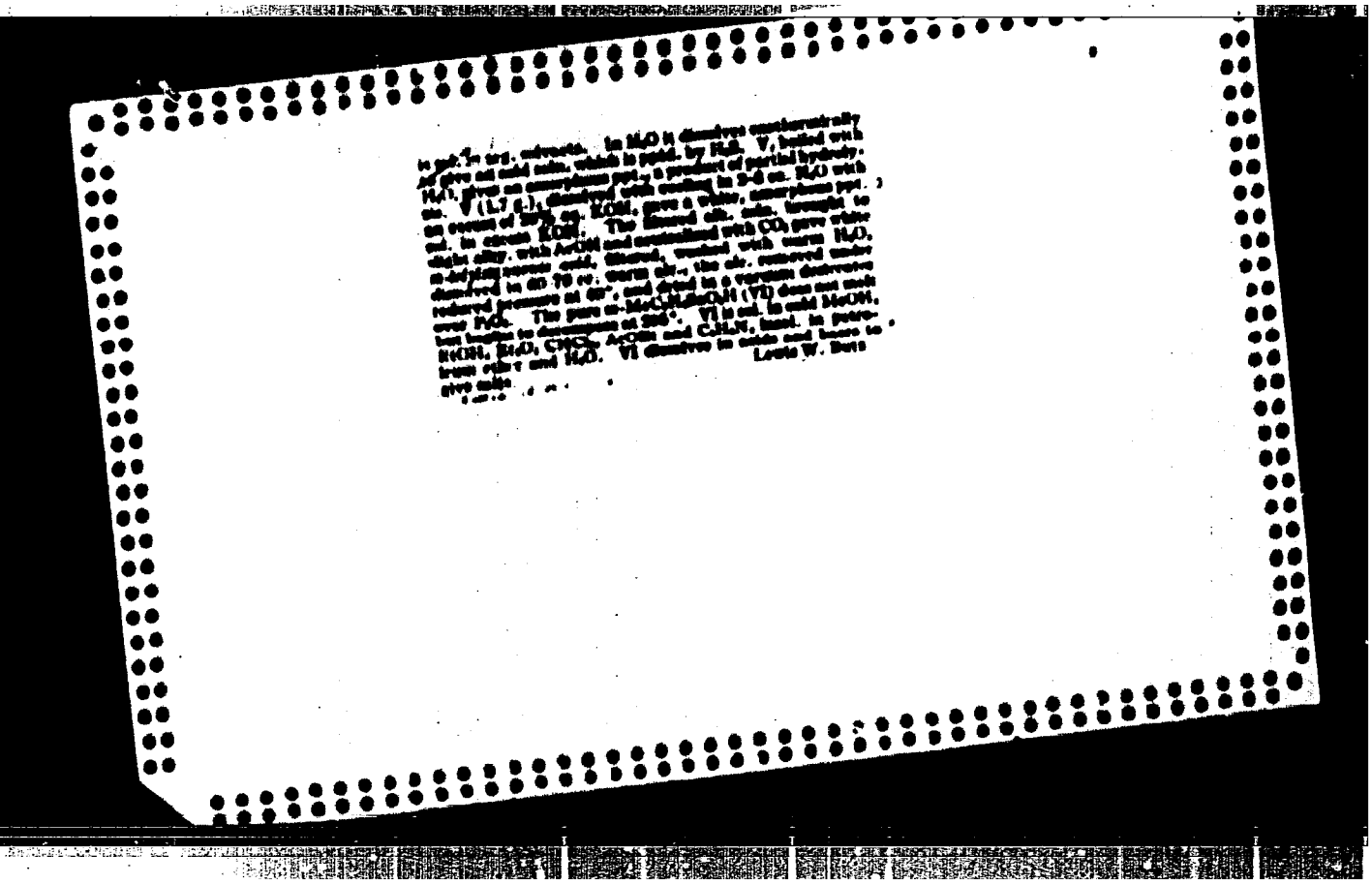
with snow and salt. Addn. of 75 g. freshly distd. $SnCl_4$ in portions with vigorous stirring, heating 2 hrs. with a reflux condenser on a water bath, removal of the Et_2O, decompn. with ice and NH_4Cl soln. (150 cc. of 1 part satd. soln. and 1 part H_2O), gave a mixt. of Mg salts, Et_4Sn and some Et_3SnCl, the last was removed by adding 100 g. Na_2CO_3 to give a nonvolatile product, Et_4Sn(?). Steam distn., extn. with 2 portions of Et_2O, removal of the Et_2O and fractional distn. gave 80 g. Et_4Sn, b. 178-80°. Several redistns. over Na gave Et_4Sn, b. 176-7°.

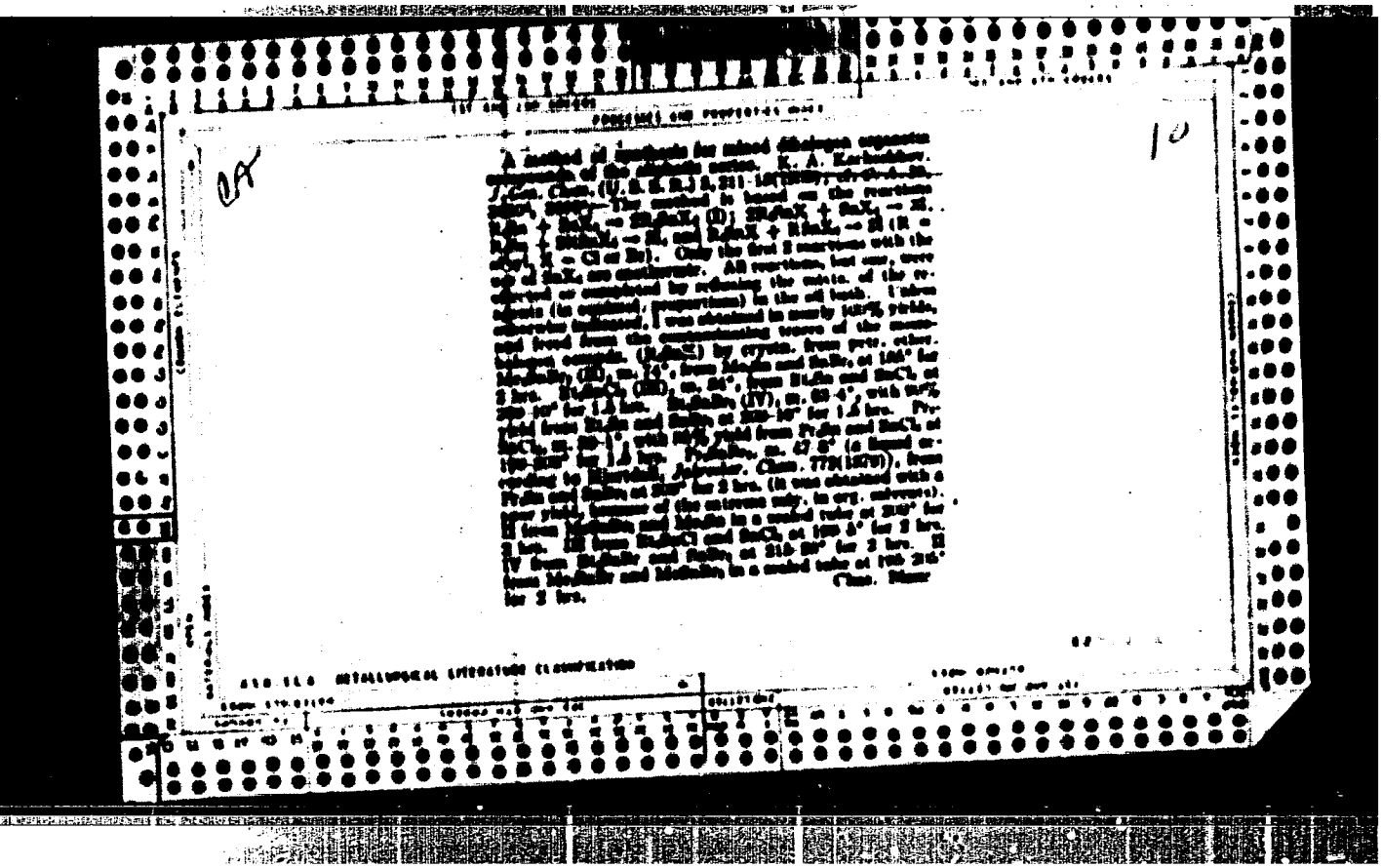


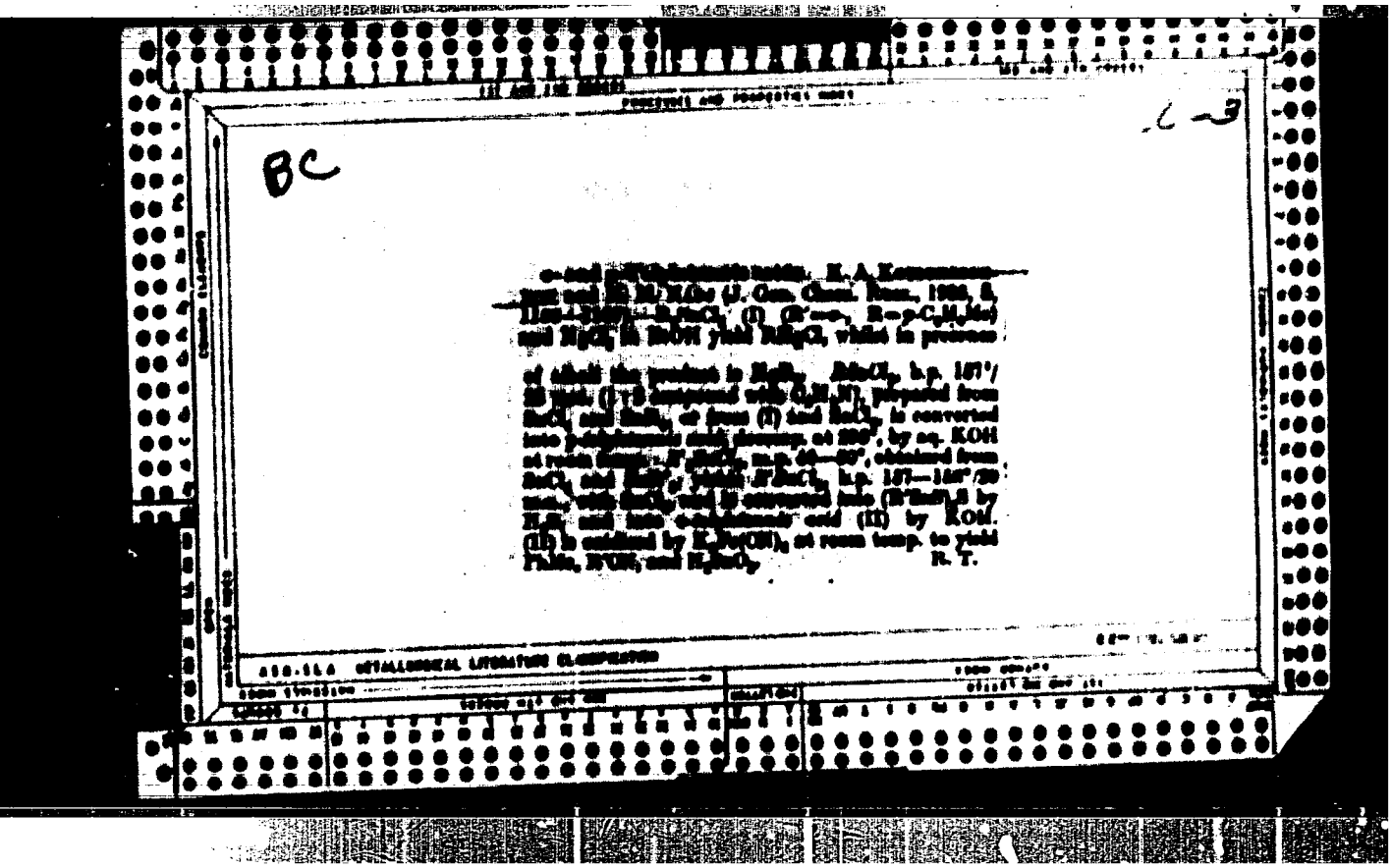
Et_4Sn (21.1 g.) with 7.8 g. freshly distd. $SnCl_4$ heated 0.75 hr. on a water bath with reflux condenser carrying a $CaCl_2$ tube, then heated 2 hrs. on an oil bath at 190-210° gave on distn. 86% of Et_3SnCl, b 783 209-11°, b 18 100-1°/ The cryst. residue is Et_2SnCl_2, m. 84°/ Et_4Sn (21.1 g.) with 13.8 g. $SnBr_4$ similarly gave 91% of Et_3SnBr, b764 223-6°, b_{20} 109-10°. A small quantity of Et_2SnBr_2, m. 43° (from petr. ether), remained after the distn. Addn. of 24.8 g. anhyd. Et_3SnCl to 23.8 g. Et_4Sn followed by heating at 210-15° for 2 hrs. and distn. of the product gave 78% of Et_2SnCl_2. Et_2SnBr_2 (33.7 g.) with 23.6 g. Et_4Sn heated 2.5 hrs. at 200-5° gave a product which on distn. gave 70% of Et_3SnBr.

Louis W. Butz









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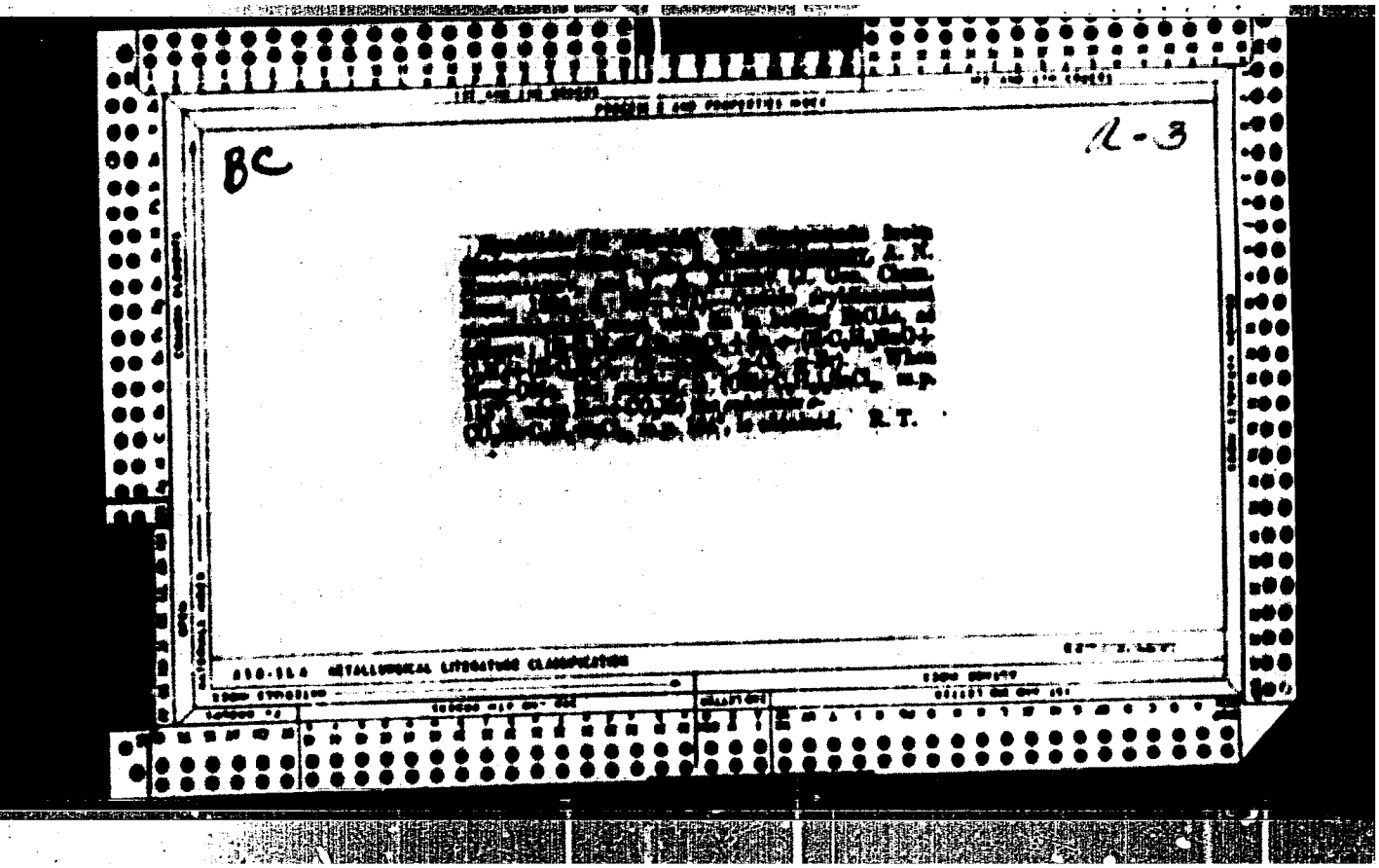
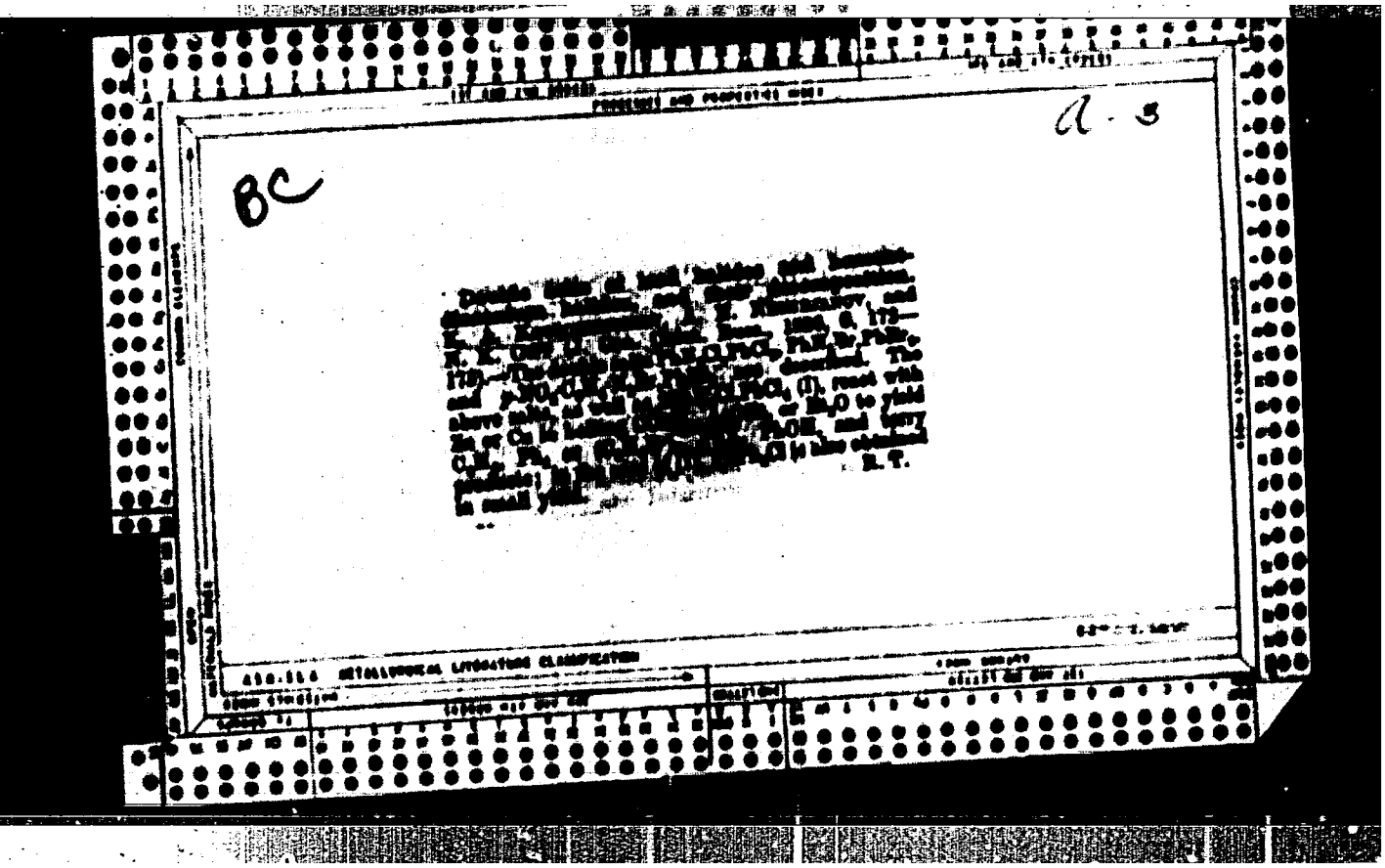
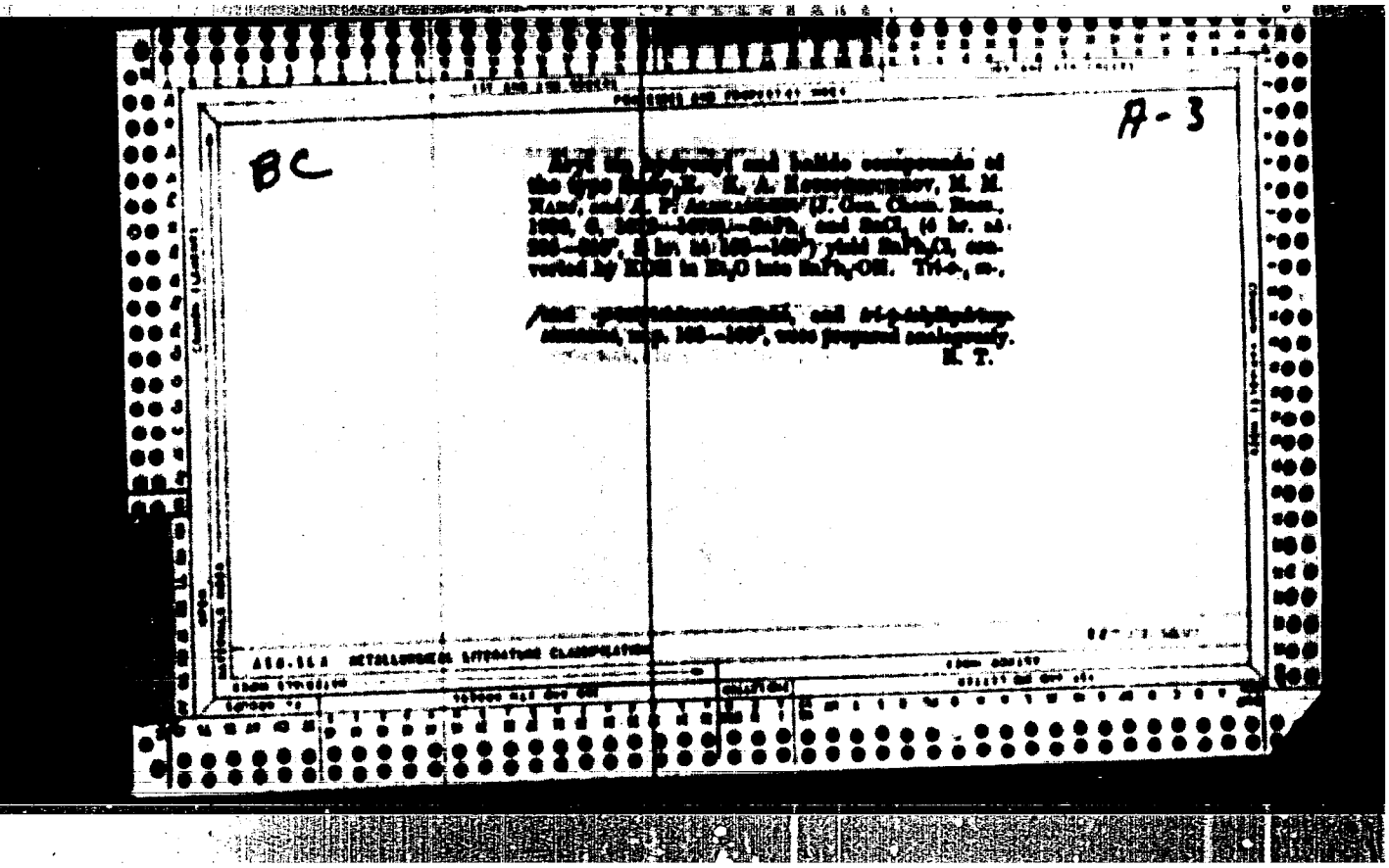
Double salts of arylammonium chlorides and chlorides of heavy metals. [illegible] and A. N. [illegible]. *J. Gen. Chem. (U.S.S.R.)* [illegible]. [illegible] (I), [illegible] (II), [illegible] (III), [illegible] were caused to react with ZnCl$_2$ and [illegible] CdCl$_2$, TlCl$_3$, SnCl$_4$, PtCl$_4$, BiCl$_3$, AuCl$_3$, PdCl$_2$ and FeCl$_3$. The double salts were prepd. by pouring the metal chloride [illegible] N HCl into [illegible] N RNCl in [illegible] N HCl prepd. by [illegible] HCl [illegible] 1 mol. RNH$_2$ in [illegible] with [illegible] and [illegible] HCl and [illegible]. The pptd. salts (the Zn and Cd salts [illegible] HCl to [illegible]. The pptd. salts [illegible] were sometimes ppt. only after long cooling at [illegible] were filtered off, washed with cold [illegible] HCl, air, and [illegible] and dried in air. The compn. of the double salts was usually independent of the relative proportions of constituents. [illegible] were taken for each mol. of RNCl, 0.5 mol. of [illegible], CdCl$_2$, SnCl$_4$, PtCl$_4$ and PdCl$_2$, and 1 mol. of TlCl$_3$, BiCl$_3$ and AuCl$_3$, and a large excess of FeCl$_3$ [illegible] the Fe salts were not pptd.). With TlCl$_3$ and BiCl$_3$ the proportions 1 mol. metal chloride and 2 mols. RNCl and 1 mol. RNCl and 1.5 mols. metal chloride were [illegible]. Concns. (M) of the metal chlorides in HCl: ZnCl$_2$ [illegible] M; CdCl$_2$ [illegible] M; TlCl$_3$ [illegible] M; SnCl$_4$ [illegible] M; PtCl$_4$ [illegible] M; AuCl$_3$ 1 M; PdCl$_2$ [illegible] M; BiCl$_3$ [illegible] M; PtCl$_4$ 1 M. The compn. of the double salts of Au, Zn, Sn, Pt and Fe was independent of the structure of R, while with the other metals the nature of R affected the compn. Au, Zn and Fe had coordination no. 4, Sn, Pt and Pd had 6. The coordination no. of Cd and Hg varied from 3 to 6, and that of Tl and Bi from 4 to 6. I always gave salts with the [illegible] no. of RNCl [illegible], being the only compd. to give with CdCl$_2$ the type RNCl.CdCl$_2$ with all [illegible] of reactants. II gave 2 II.CdCl$_2$ and with BiCl$_3$ only 2 II.BiCl$_3$. TlCl$_3$ gave only II.TlCl$_3$. Both II.HgCl$_2$ and 2 II.HgCl$_2$ were formed. III gave salts with [illegible] coordination no. of the metal, except that the 2 III.BiCl$_3$ was contaminated with some III.BiCl$_3$. III was the only [illegible] RNCl to give a pure salt of the type (RNCl)$_3$.TlCl$_3$ and [illegible] which did not give RNCl.TlCl$_3$. For the remaining compds. the influence of R is less pronounced. The [illegible] in many solvents and the decompn. temp. of each double salt are given. These properties are of interest in connection with the formation of organometallic compds. from the double salts. The [illegible] was affected chiefly by the nature of the metal component, the decompn. temp. by the nature of R. The presence of [illegible] substituents in the Ph nucleus made for increased thermal stability, the [illegible] derivs. being most stable. The salts of Pt, Cd, Bi and Sn were the most stable. The compn. of each double salt and a review of earlier literature are given. L. W. B.

[illegible] METALLURGICAL LITERATURE CLASSIFICATION [illegible]



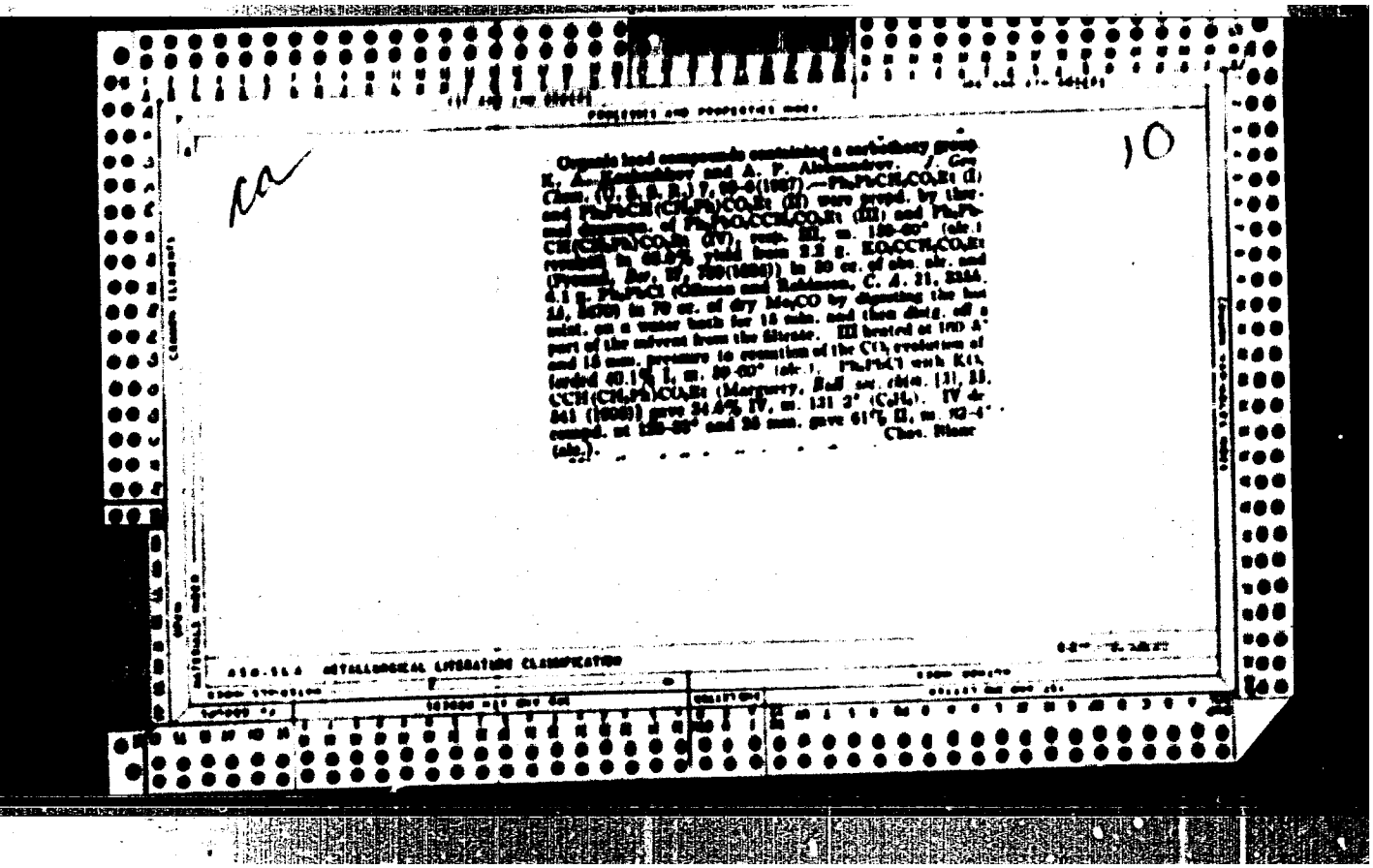


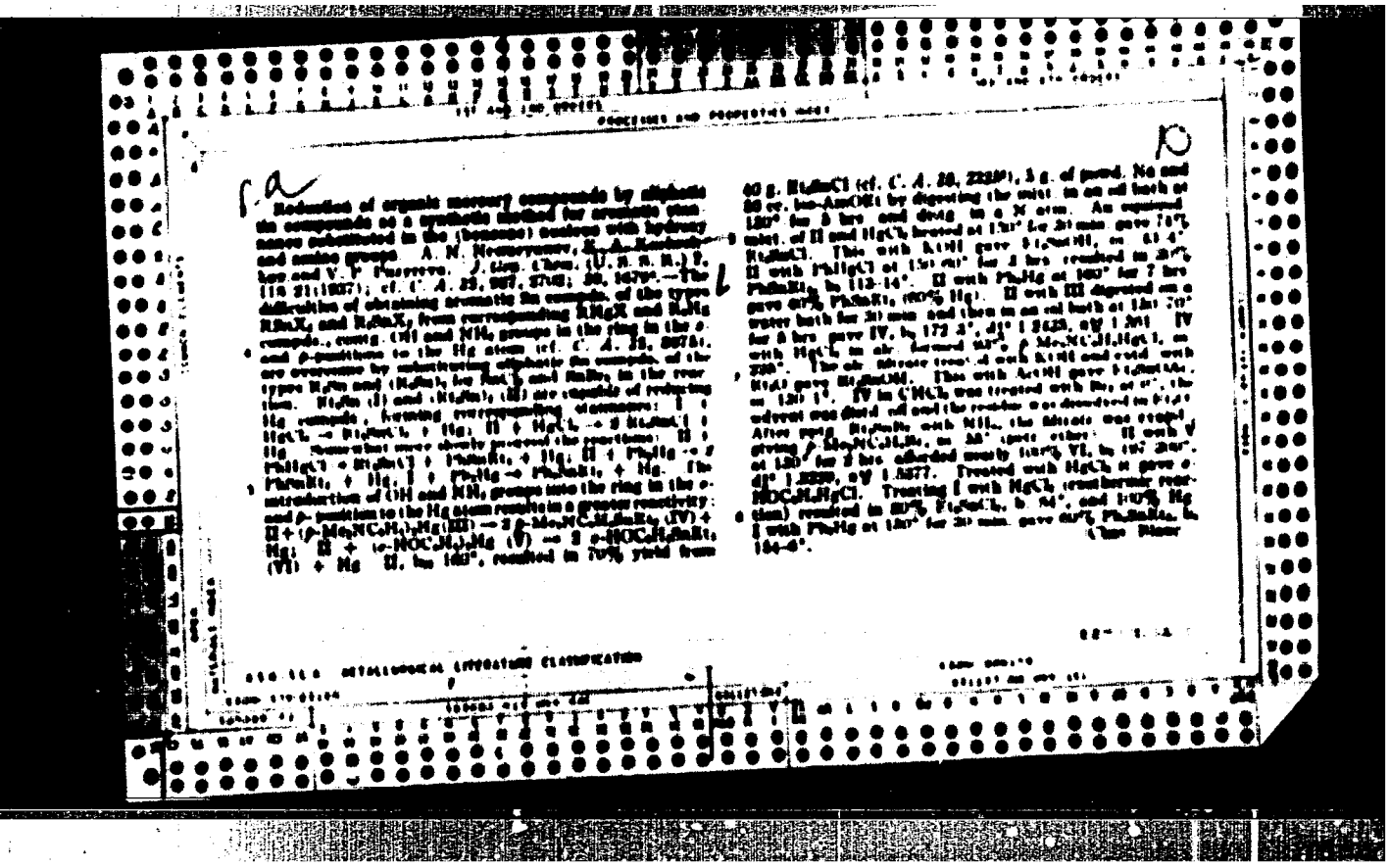


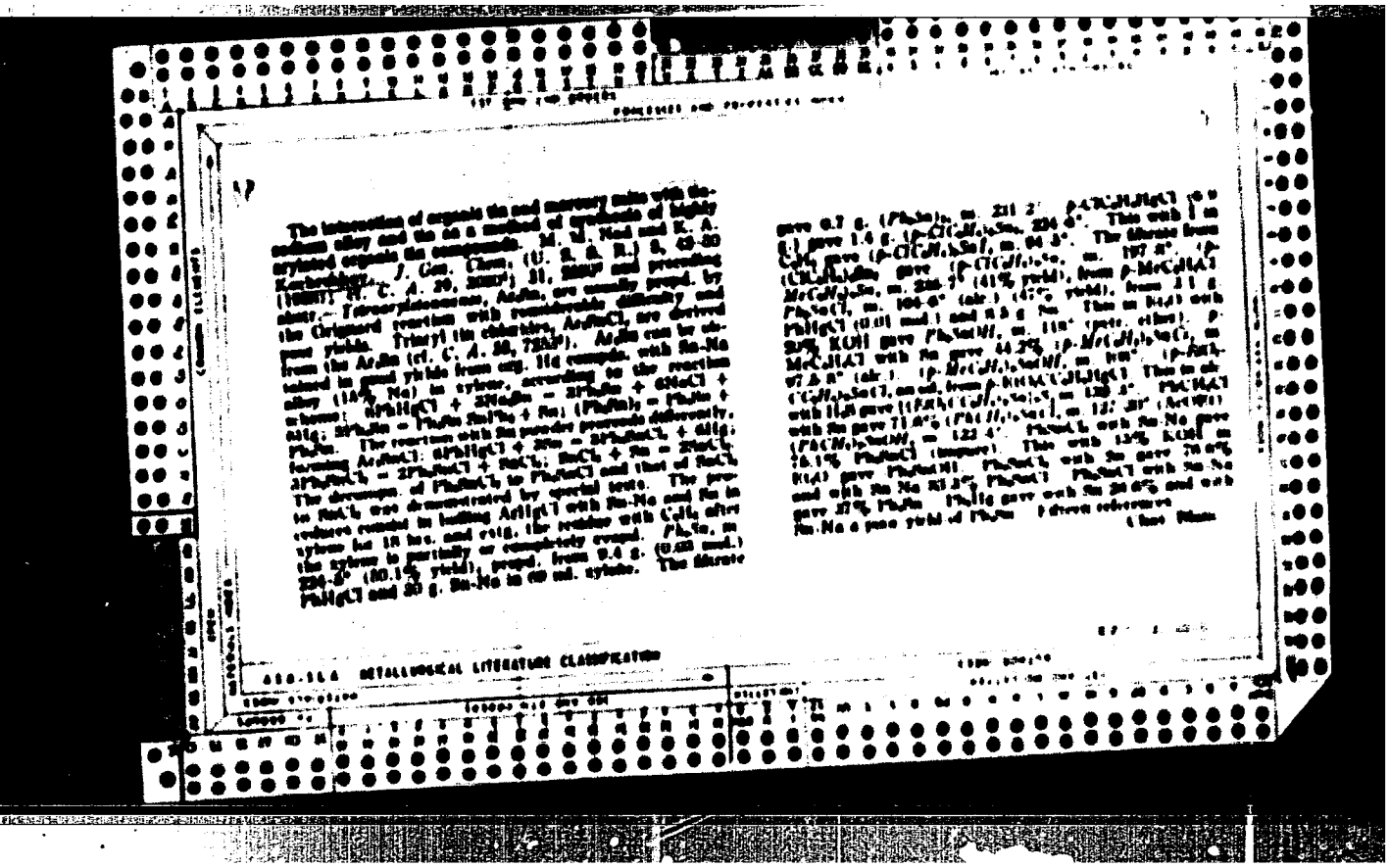
PROCESSES AND PROPERTIES INDEX

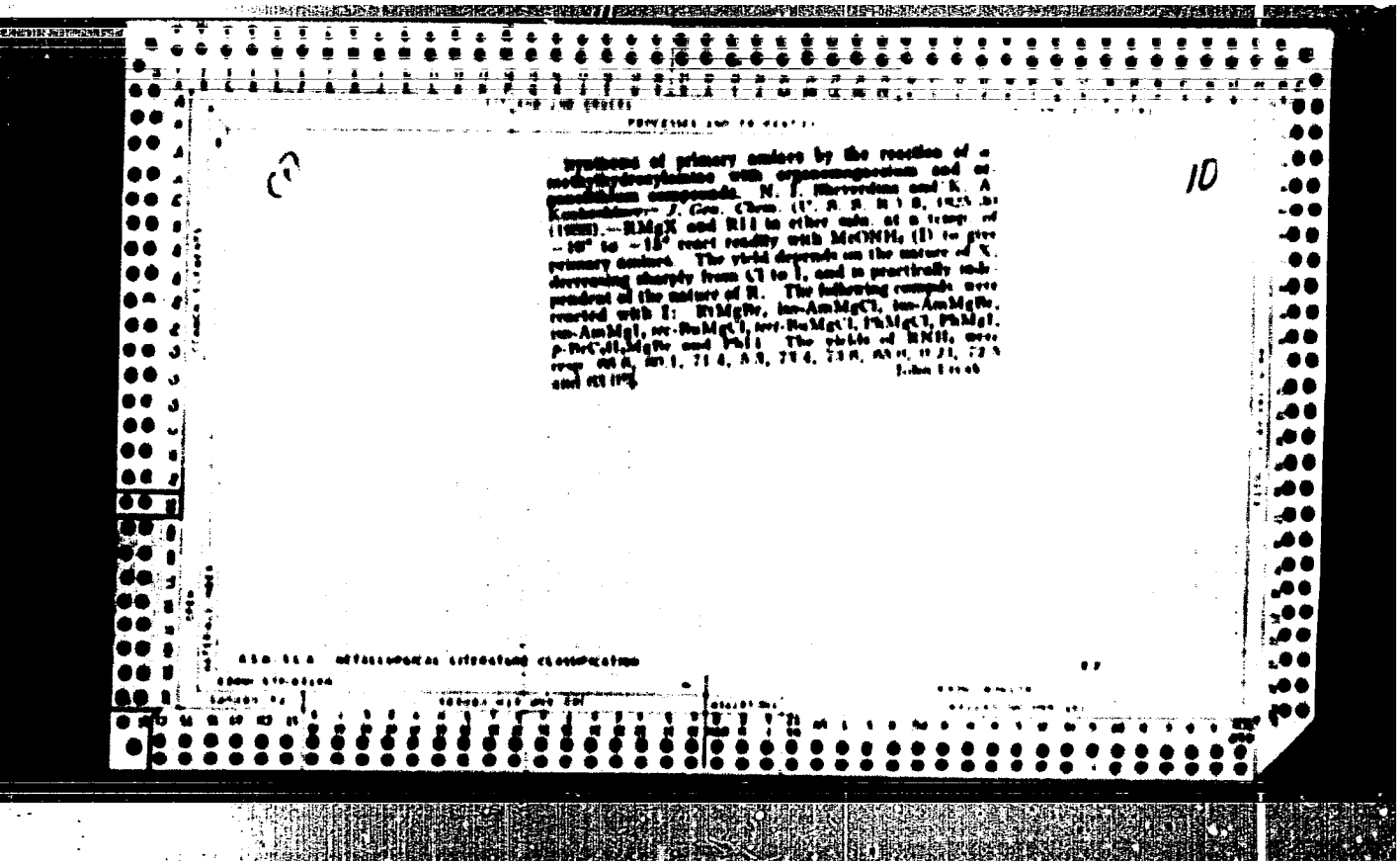
Reduction of lead organic nitro compounds. K. A. Kocheshkov and G. M. Borodina. *Bull. acad. sci. U. R. S. S., Classe sci. math. nat., Sér. chim.* 1937, 569-75 (in English 576).—The purpose of this paper is to discuss the effect of reducing conditions on Pb org. nitro compds. contg. the NO_2 group on an aryl group. Org. compds. of Hg, As, Sb and B are mentioned. With Sb and B only can the NO_2 group be directly attached. With Hg and As, the NH_2 group must be present before the metal substituent can be attached. Schmidt's method (*C. A.* 17, 80) is used with Sb. Reduction of bis(m-nitrophenyl)lead diacetate (I) with dil. HCl and Fe yielded 96% aniline after 2 days of intermittent agitation. $TiCl_3$ in 15% HCl required 8 days continuous agitation for 100% reduction. $SnCl_2$ and dil. HCl and EtOH also yielded aniline. Reduction in neutral soln. was performed according to Lyons and Smith (*C. A.* 21, 1637). Reduction with $(NH_4)_2S$ yielded PbS only. I and $Ba(OH)_2$ and $Fe_2(SO_4)_3$ in equiv. quantities yielded [illegible] org. Pb compds. Bi behaves similarly. In general, I can be reduced in acid, neutral, or alk. environment. The NO_2 is reduced to NH_2 with simultaneous cleavage of the aryl radical from Pb. The Pb group contg. the NO_2 group in the m-position is closely bound to Pb, and HCl will not remove it. The Pb group contg. the amino group in the so-called "relative order of electronegativity of org. radicals" according to Kharasch, occupies a place to the left of the line, and therefore is definitely electronegative. This accounts for the lability of this combination. [illegible]

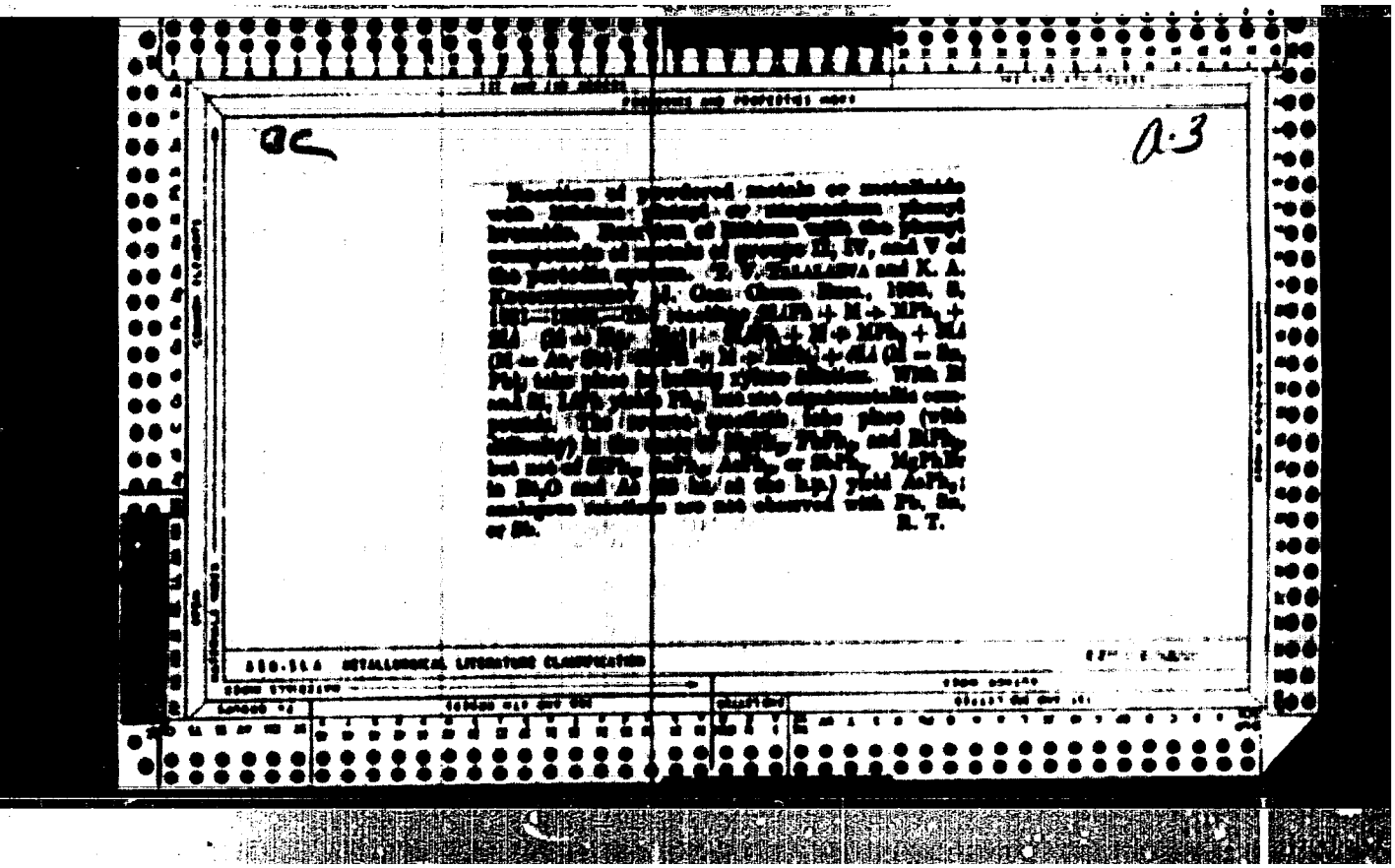
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

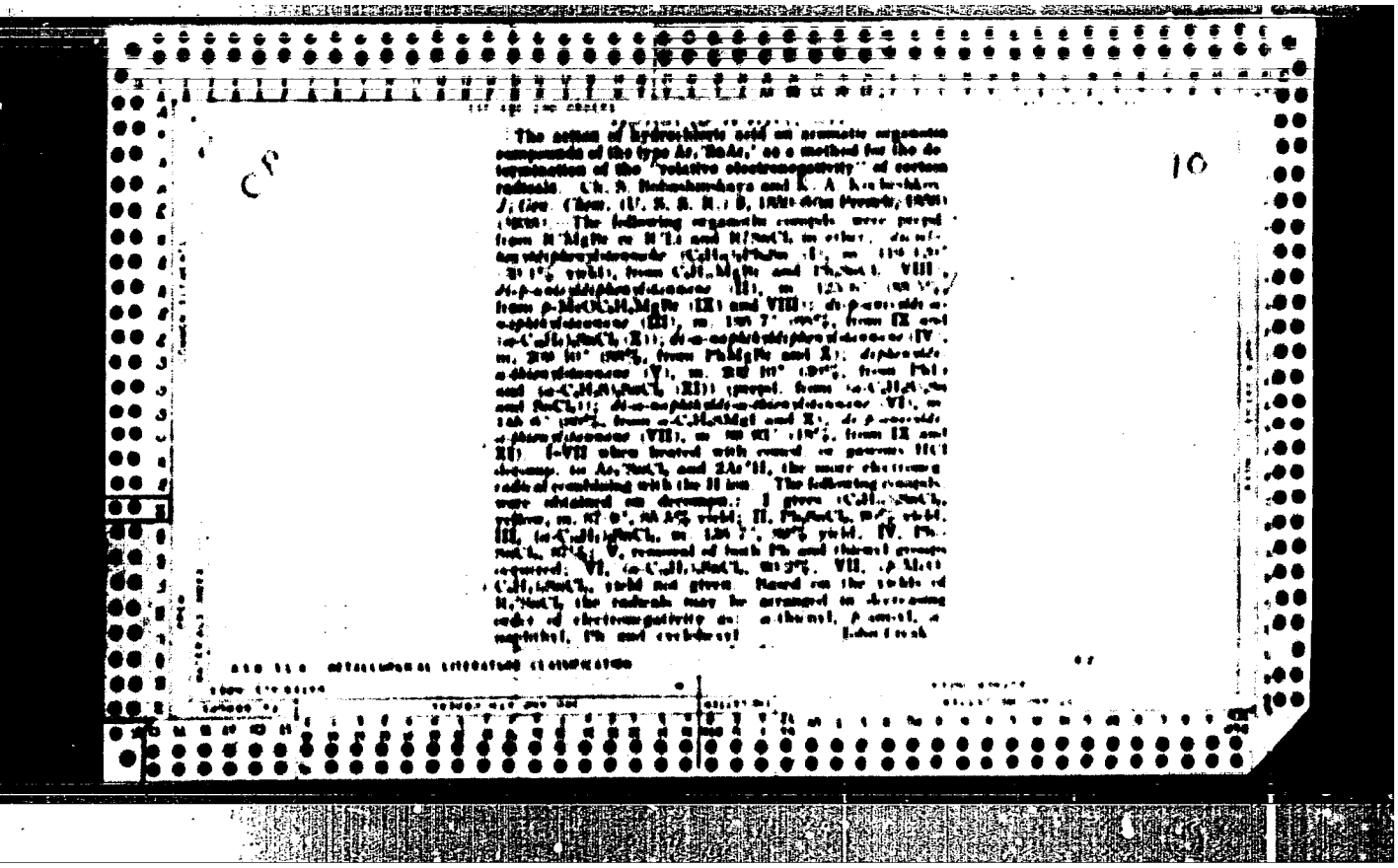












PROCESSES AND PROPERTIES INDEX

BC

A-1

Carbonyls of group VI metals. I. K. A. Kocheshkov, A. N. Nesmeyanov, M. M. Nadj, I. M. Rossinskaya, and L. M. Borisova. II. K. N. Anisimov and A. N. Nesmeyanov (Compt. rend. Acad. Sci. U.R.S.S., 1940, 26, 54—57, 58—60).—I. Reduction of WCl_6 and $MoCl_5$ at −10° to 0° by CO and Fe or Zn dust in Et_2O + C_6H_6 yields $M(CO)_6$. Improved yields of $W(CO)_6$ and $Mo(CO)_6$ were obtained respectively in dry Et_2O and $COMe_2$. The intermediate formation of a sub-halide, unstable at low temp., is tentatively advanced to explain, inter alia, the low yields of ~10—14%.

II. Increased initial pressure of CO improve the yields of $W(CO)_6$ and $Mo(CO)_6$. $W(CO)_6$ can also be prepared from $WOCl_4$ in Et_2O by the method given above. Carbonyls could not be prepared from WO_3 or from $CrCl_3$.

W. R. A.

METALLURGICAL LITERATURE CLASSIFICATION

KOCHESHKOV, K. A.

"Reaction between N-benzylhydroxylamine and Organometallic Compounds of Magnesium and Lithium as a Method for the Synthesis of Primary Amines," Iz. Ak. Nauk SSSR, Otdel. Khim. Nauk, No. 1, 1941

KOCHESHKOV, K. A.

"Organometallic compounds in the Fridel-Krafts reaction." Skoldinow, A. P., and Kocheshkov, K. A. (p. 402)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1942, Vol 12, No 7-8.

KOCHESHKOW, K. A.

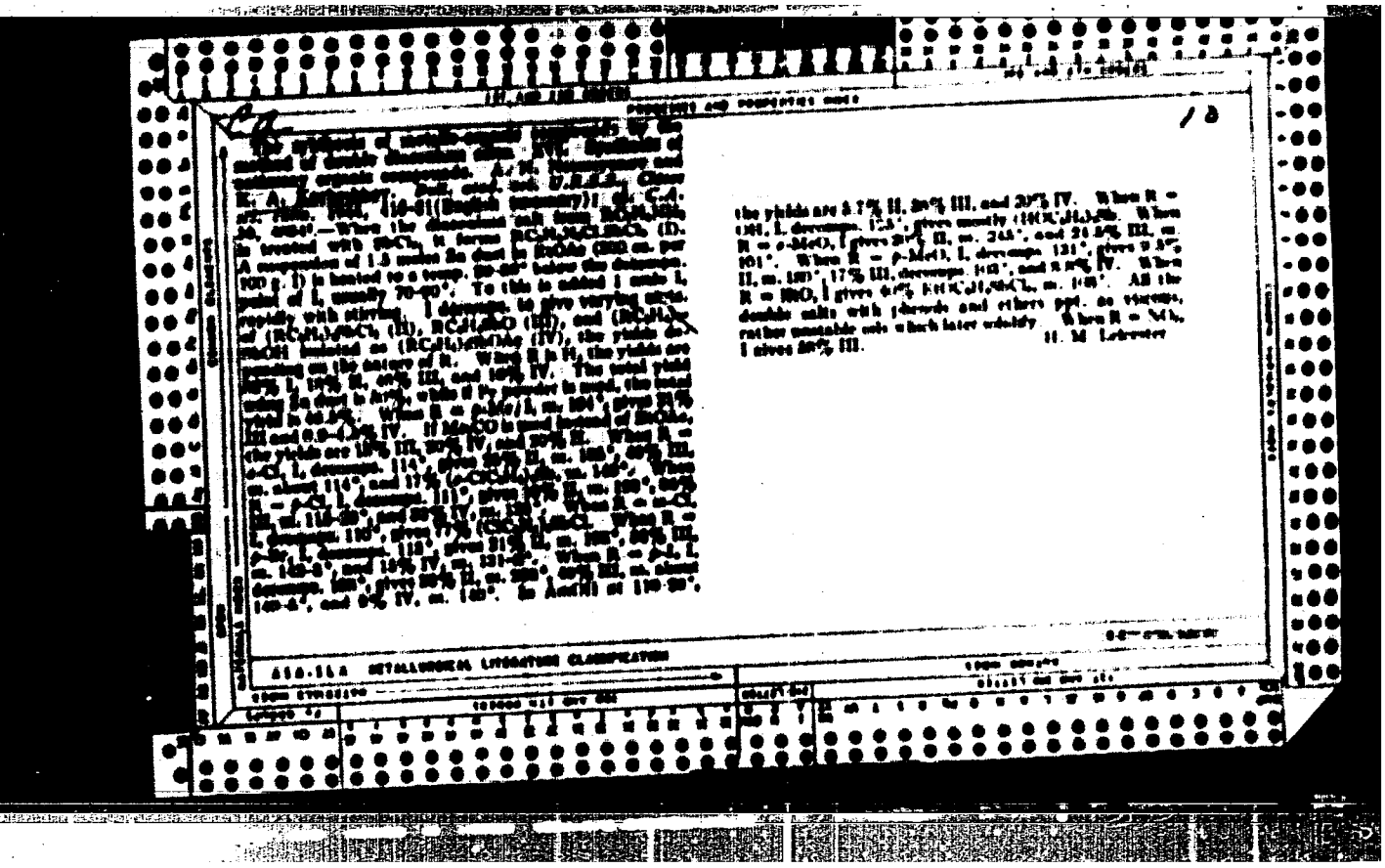
"Synthesis of organometallic compounds of tin by the aktion of organometallic compounds of lithium upon the salts or the amalgam of tin." Talalaeva, T. V., and Kochashkov, K. A. (p. 407)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1942, Vol. 12, No 7-8.

KOCHESHKOV, K. A.

"Method for the synthesis of organometallic compounds of lead having a substituted group in the benzene nucleus." Najd, M. M., and Kocheshkov, K. A. (p. 413)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1942, Vol 12, No 7-8.



CA

Synthesis of organometallic compounds by the use of double diazonium salts. XVII. Tetraphenyllead. A. N. Nesmeyanov and K. A. Kocheshkov. *Bull. acad. sci. U.R.S.S., Classe sci. chim.* [illegible]; cf. *C.A.* [illegible]. Addn. of Pb to $Ph_2N_2BF_4$ in $COMe_2$ at 0° yields $PbPh_4$ (18%), m. 228°. In EtOH, evolution of N is observed only at 35°, but no $PbPh_4$ is obtained. The reaction mechanism is discussed. XVIII. Tris(*p*-sulfamylphenyl)bismuth. *Ibid.* [illegible].—(p-$NH_2SO_2C_6H_4N_2Cl$)·$BiCl_3$ (Chalkley, *C.A.* [illegible]) with 50% excess of Bi in $COMe_2$ at 20°, or EtOH at 180°, affords, resp., 26 or 6% of tris(*p*-sulfamylphenyl)bismuth (I), m. 283°. With Br in CCl_4 I gives p-$BrC_6H_4SO_2NH_2$ in nearly theoretical yield. Treatment of the double salt with Cu in $COMe_2$ or EtOH affords mainly p-$ClC_6H_4SO_2NH_2$. B. A.

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION

CA

10

Dearylation of [illegible] organic tin compounds as a method of synthesizing $RSnX_3$ in the aliphatic series. M. V. Pavlovskaya and K. A. Kocheshkov. *Compt. rend. acad. sci. U.R.S.S.* 49, [illegible]. The phys. consts. for ethyltin trichloride (I) as reported by several investigators vary greatly. The authors prepd. I by a direct, general method devised for aliphatic $RSnX_3$ compds. based on selective dearylation according to the reactions: $Ar_3SnX + RMgX \rightarrow Ar_3SnR + MgX_2$; $Ar_3SnR + 3SnX_4 \rightarrow RSnX_3 + 3ArSnX_3$. Detailed directions for the prepn. of ethyltriphenyltin (II) (71% yield) and of I, m. 43-4°, (83% yield) are given. The structure of I was confirmed by reconversion to II by phenylation with phenyllithium. Karl F. Urbach

METALLURGICAL LITERATURE CLASSIFICATION

KOCHESHKOV, K. A.

"Metallo-Organic Combination of Magnesium and Lithium in the Synthesis of Amines," a lecture delivered at the June session of the Dept. Chem. Sci., AS USSR held 28-29 June 1946. Work compiled with N. ".Sheverdina.

Vestnik AS USSR 8/9, 1946

KOCHESHKOV, KO A.

Synthesis of a[illegible]mony organic compounds by lithium organic compounds. [illegible] and K. A. Kocheshkov (Moscow All-Union Inst. Exptl. Med.). *J. Gen. Chem.* (U.S.S.R.) **16**, [illegible] To an Et_2O soln. of PhLi (from 62.7 g. PhBr and 6.7 g. Li) there was added with ice-cooling 22.8 g. $SbCl_3$ in 100 cc. Et_2O and the mixt. was boiled for 2 hrs., cooled, and treated with ice, yielding, after evapn. of the Et_2O, 86-7% Ph_3Sb, m. 52° (from petr. ether). Similarly, p-BrC_6H_4Me gave 95.3% *tri-p-tolylantimony*, m. 127° (from MeOH); p-bromoanisole gave 31% *tri-p-anisylantimony*, m. 180° (from $CHCl_3$-EtOH); p-bromophenetole gave 85.4% *tri-p-phenetylantimony*, m. 82°; p-bromodiphenyl gave [illegible]% *tri-p-biphenylylantimony*, m. 176° (from $CHCl_3$ and EtOH); 1-$C_{10}H_7Br$ gave 17% *tri-1-naphthylantimony*, m. 218-19° (from benzene); p-$BrC_6H_4NMe_2$ gave [illegible]% *tri-p-dimethylaminophenylantimony*, m. [illegible]° (from $CHCl_3$-EtOH). The use of Li compds. was much [illegible] successful than that of the Mg Grignards. G. M. K[illegible]

KOCHESHKOV, K.A.

RT-106 (The synthesis of organo-bismuth compounds of the R_3Bi type by the method of double diazonium salts). Sintez vismutoorganicheskikh soedinenii tipa R_3Bi metodom dvoinykh diazonievykh solei.
Zhurnal Obshchei Khimii, 16(6): 891-896, 1946.

KOCHESHKOV, K.A.

RT-105 (Aromatic bismuth compounds containing a halogen atom in the nucleus). Aromaticheskie vismutoorganicheskie soedineniia soderzhashchie galoid v iadre. Zhurnal Obshchei Khimii, 16(6): 897-900, 1946.

KOCHESHKOV, K. A.

"Organo-Tin Compounds of the p-Anisyl, p-Phenetyl and p-Biphenyl Series " by T. V. Talalaeva, N. A Zaytzeva and K. A Kocheshkov (p. 905)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1 46, Volume 16, No. 6

7a No. 7 10

Sulfanilamide derivatives of the cholesteryl ester of carbamic acid. V. F. Kucherov and K. A. Kocheshkov. *J. Gen. Chem.* (U.S.S.R.) 16, 1137-42 (1946) (in Russian). —Cholesterol (10 g.) in 100 cc. Et_2O was slowly treated with $COCl_2$ until the initially formed ppt. went back into soln. The soln. was allowed to stand 2-3 hrs. and freed of solvent to yield 78-80% *cholesteryl chloroformate*, m. 117-18° (from Me_2CO). This (6 g.) in 30 cc. abs. Et_2O was treated with 2.7 g. $PhNH_2$ to give 85.2% of the corresponding *carbanilate*, m. 165-6.5° (from C_6H_6); 2-aminopyridine gave the *2-pyridinecarbamate*, m. 226-8.5° (decompn.; from C_6H_6); piperidine gave the *1-piperidinecarbamate*, m. 169-70° (from C_6H_6-Me_2CO); Et *p*-aminobenzoate gave the *p-carbethoxyphenylcarbamate*, m. 190-1° (from Me_2CO); sulfanilamide (in Et_2O-Me_2CO) gave the *p-sulfamylcarbanilate*, m. 240.5-51° (decompn.; from EtOH-Me_2CO); *sulfapyridine analog* m. 234-4.5° (decompn.; from C_6H_6); *sulfaguanidine analog* m. 226-8.5° (from pyridine-Me_2CO); *sulfathiazine analog* m. [illegible] (from pyridine-Me_2CO). O. M. Kosolapoff

Ca

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PROCESSES AND PROPERTIES INDEX

Amino derivatives of the heterocyclic series. I. Certain derivatives of 2-aminothiazole. M. P. Kurbarova and [illegible].—*J. Gen. Chem. (U.S.S.R.)* 16, 1701-8(1946).—Thiourea (12.4 g.) suspended in 40 cc. H_2O was treated over 0.5 hr. with [illegible] g. 2-bromocyclohexanone and the mixt. heated to boiling 2 hrs. and cooled to yield [illegible]% 2-amino-4,5,6,7-tetrahydrobenzothiazole·HBr, m. 256-6° (from H_2O); treatment of this with 170 cc. 40% NaOH in 200 cc. water at 30-40°, followed by cooling, gave 90% of the free base (I), m. 87-8° (from water, then ligroin). I (0.9 g.) was treated with 0.4 g. Ac_2O in 0.8 cc. AcOH and was allowed to stand overnight; after addn. of 2-3 cc. water the product was filtered and washed with water; 2-acetamido-4,5,6,7-tetrahydrobenzothiazole, m. 160-1° (from dil. Me_2CO). I (0.40 g.) in 5 cc. H_2O was added to 1 g. chlorotoxyl chloroformate (II) in 18 cc. H_2O and the mixt. was allowed to stand for 2 hrs. to give 41.0% chlorotoxyl 4,5,6,7-tetrahydro-2-benzothiazolecarbamate, m. 246-6.5° (from C_6H_6-Me_2CO). 4-Methyl-2-aminothiazole (2.5 g.) in 15 cc. H_2O was treated with 5 g. II in 20 cc. H_2O and allowed to stand overnight to yield 84.5% chlorotoxyl 4-methyl-2-thiazolecarbamate, m. 256-8° (from C_6H_6). 4-Methylthiazole[illegible] (3.8 g.) in 270 cc. Me_2CO was treated with 2.9 g. II in 30 cc. H_2O and allowed to stand for 3 days to yield 38.4% chlorotoxyl p-(4-methyl-2-thiazolylsulfamyl)carbanilate, m. 249-50° (from C_5H_5N-Me_2CO, then C_5H_5N). I (12.3 g.) in 24 cc. C_5H_5N was treated with 20.3 g. p-$AcNHC_6H_4SO_2Cl$ over 1 hr. at below 20°, after which the mixt. was kept at 60-70° 4 hrs., cooled to 40°, treated with 20 cc. water, and stirred 1 hr.; the ppt. was sepd., washed with 1% HCl and H_2O; purification of the resulting 2-(N[illegible]-acetylsulfanilamido)-4,5,6,7-tetrahydrobenzothiazole was accomplished by soln. of 20.4 g. in 27.4 g. 7% NaOH, treatment with 0.4 g. charcoal and 0.2 g. $Na_2S_2O_4$, refluxing 1.5 hrs., filtering, and acidifying with 18 cc. HCl on cooling; yield 48%, m. 269-70°. This (10 g.) in 40 g. 10% NaOH and 0.4 g. activated charcoal and 0.4 g. $Na_2S_2O_4$ was refluxed 0.5 hr., cooled, filtered, treated with 10 cc. concd. HCl, then 1:4 HCl to neutral litmus reaction; the crude 2-sulfanilamido-4,5,6,7-tetrahydrobenzothiazole was purified by soln. in 20 cc. 8% NaOH, heated with 0.3 g. charcoal and 0.3 g. $Na_2S_2O_4$ to boiling 0.5 hr., filtered, cooled, and treated with 10 g. concd. HCl and dil. HCl to neutral litmus reaction; yield, 77.2%, m. 204-6° (cf. Sprague and Kissinger, *C.A.* 34, 2164[illegible]; Bose and Das-Gupta, *C.A.* 36, 7547). II. Nonpyridic products of condensation of 5-halo-2-aminopyridines with diethyl malonate. N. P. Kucharova, V. P. Kurbarov, and K. A. Kurbashkov. *Ibid.* 1709-14.—Although 2-aminopyridine condenses with $CH_2(CO_2Et)_2$ (I) to form cyclic derivative (Chichibabin, *C.A.* 19, [illegible]), 5-nitro-2-aminopyridine and 3,5-dihalo-2-aminopyridines fail to react even at 190-200°. However, 5-halo-2-aminopyridines do react with formation of noncyclic products only. 5-Chloro-2-aminopyridine (10 g.) and 25.3 g. I were heated 1 hr. to 170°, with slow distn. of the resulting EtOH; the heating was continued 0.5 hr. at 190° and the product, crystd. by cooling, represented 2.5 g. Me_2CO-insol. powder, identified as *N,N'*-bis(5-chloro-2-pyridyl)malonamide

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

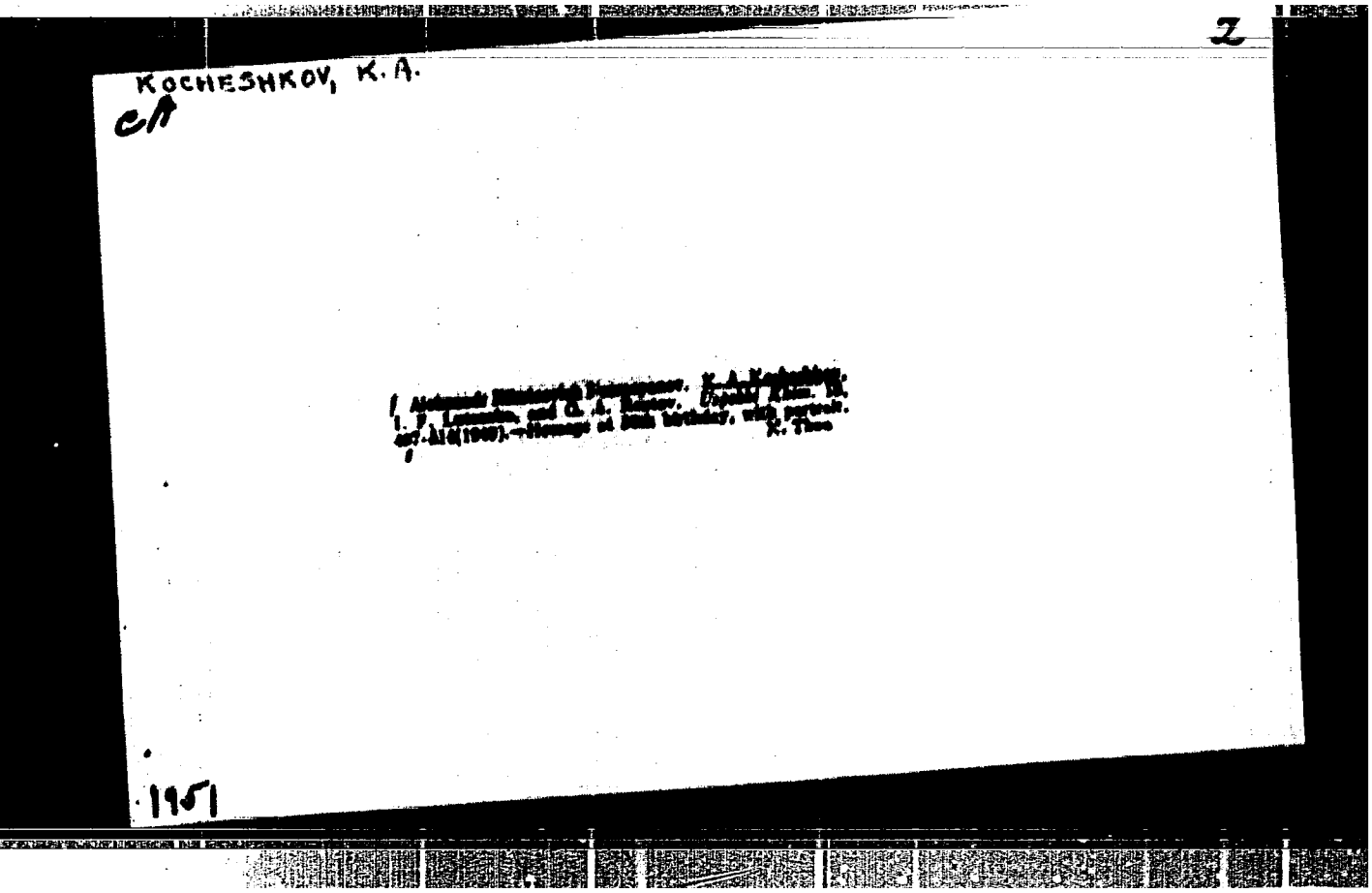
amide, m. 206-7° (from EtOH-C_5H_5N); the mother liquor with 10 parts H_2O and a little EtOH gave 5 g. Et *N-(5-chloro-2-pyridyl)malonamate*, m. 100-6° (from petr. ether). Similarly, 14 g. 5-bromo-2-aminopyridine and 20 g. I gave after 2.5 hrs. at 190° 3.2 g. *N,N'-bis(5-bromo-2-pyridyl)malonamide*, m. 220-6° (from pyridine-Me_2CO) and 5.5 g. Et *N-(5-bromo-2-pyridyl)malonamate*, m. 100-1° (from dil. Me_2CO); 6 g. 5-iodo-2-aminopyridine and 1 g. (?) I gave after 2.5 hrs. at 190° 1.4 g. *N,N'-bis(5-iodo-2-pyridyl)malonamide*, m. 244-5° (from EtOH-C_5H_5N), and 4.5 g. Et *N-(5-iodo-2-pyridyl)malonamate* (III), m. 117-18° (from dil. Me_2CO). When 1.2 g. II and 1 g. 5-iodo-2-aminopyridine were heated to 180-200° 0.5 hr., there was obtained 88.2% of the corresponding diamide. The Br malonamate similarly heated with 5-bromo-2-aminopyridine gave 90% of the disubstituted malonamide. Et *N-(5-iodo-2-pyridyl)malonamate* (1 g.) and 0.5 g. 5-bromo-2-aminopyridine heated 45 min. to 190-200° yielded 70.5% *N-(5-iodo-2-pyridyl)-N'-(5-bromo-2-pyridyl)malonamide*, m. 238-9° (from EtOH-C_5H_5N), while 2.5 g. Et *N-(5-chloro-2-pyridyl)malonamate* and 1.7 g. 5-bromo-2-aminopyridine similarly gave 80.9% *N-(5-chloro-2-pyridyl)-N'-(5-bromo-2-pyridyl)malonamide*, m. 235-6° (from EtOH-C_5H_5N) (the latter product is obtained also by the interaction of 5-chloro-2-aminopyridine with the corresponding Br-substituted malonamate). Et *N-(5-chloro-2-pyridyl)malonamate* (4 g.) in 17 cc. cold concd. H_2SO_4, allowed to stand 7 days and, after diln. with cold H_2O, neutralized with 20% NaOH, gave 2.7 g. *N-(5-chloro-2-pyridyl)malonamic acid*, m. 150-2.5° (from EtOH), which loses CO_2 on heating above the m.p. to yield *5-chloro-2-acetamidopyridine*, m. 171° (from EtOH); similarly, there were prepd. *N-(5-bromo-2-pyridyl)malonamic acid*, m. 150-2° (from MeOH-Me_2CO) (70.7%); *5-bromo-2-acetamidopyridine* m. 175-6° (from EtOH); *N-(5-iodo-2-pyridyl)malonamic acid* m. 144-5° (from Me_2CO) (66.5%); *5-iodo-2-acetamidopyridine* m. 154-5° (from EtOH). G. M. K.

KOCHESHKOV, K. A.

"Synthetic Methods in the Field of Organometallic Compounds of Elements of the IVth Group," 1947

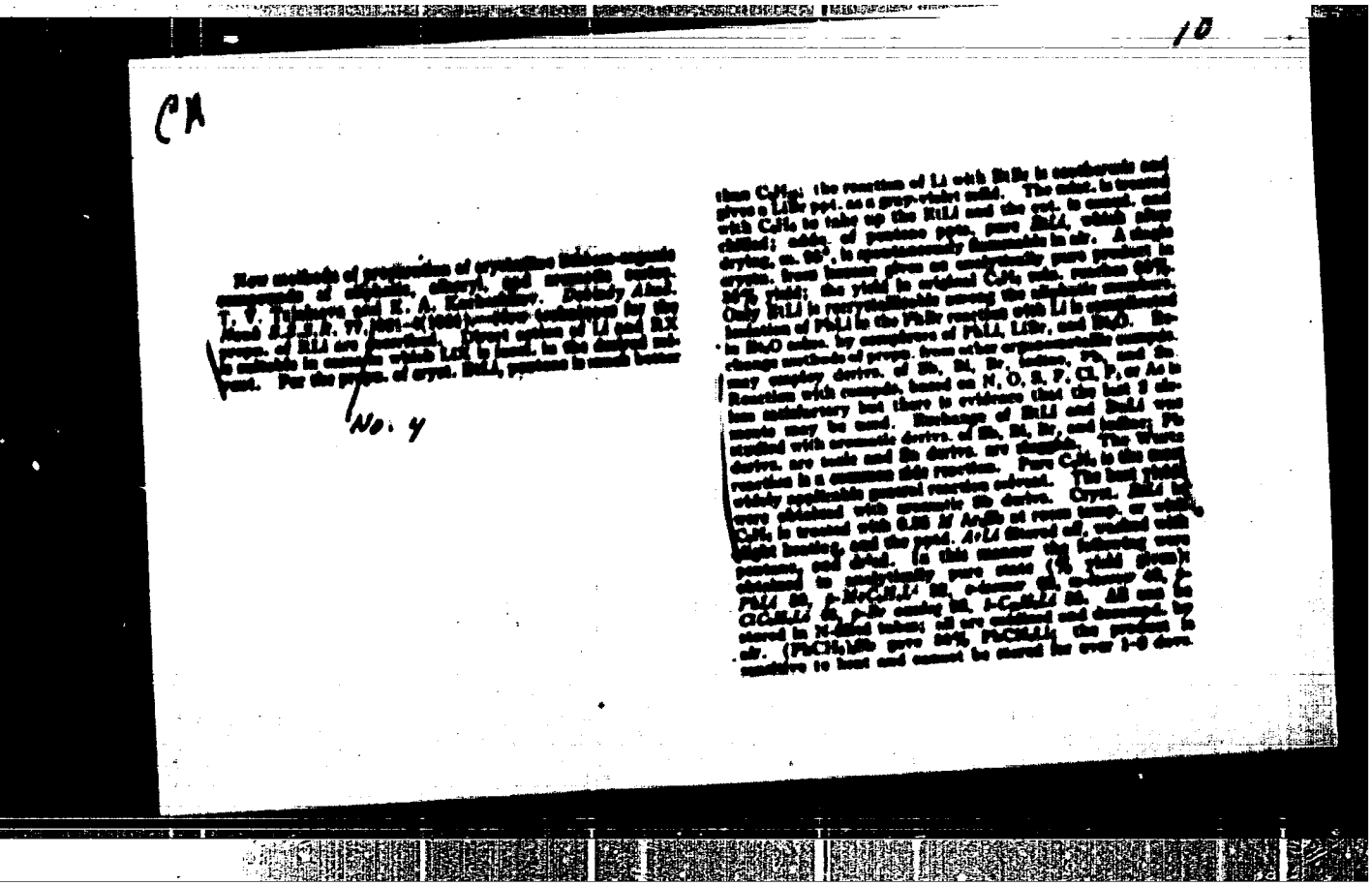
CA

Metalloörganic compounds of lithium, sodium, potassium, rubidium, and cesium. K. A. Kocheshkov and T. V. Talalaeva. Sintet. Metody v Oblasti Metalloorg. Soedinenii, Inst. Org. Khim., Akad. Nauk S.S.S.R. 1945, No. 1, 174 pp. Mercury organic compounds. L. G. Makarova and A. N. Nesmeyanov. Ibid. 1945, No. 2, 168 pp. Metallo-organic compounds of elements of the third group. K. A. Kocheshkov and A. N. Nesmeyanov. Ibid. 1945, No. 4, 131 pp. Metalloörganic compounds of elements of the fourth group. K. A. Kocheshkov. Ibid. 1947, No. 5, 131 pp. Arsenic organic compounds. R. Kh. Freidlina. Ibid. 1945, No. 7, 180 pp.—Compilations contain the methods of synthesis, properties, reactions, and analysis of these compds. M. Hosch



KOCHESHKOV, K. A.

"Synthetic Methods in the Field of Metal-Organic Compounds of Lithium, Sodium, Potassium, Rubidium and Caesim," Moscow, 1950.



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No. 4

USSR/Chemistry - Oxocompounds, Catalysts 21 May 52

"Acylation of Oxocompounds in the Presence of 'Acid' Agents," A. P. Skoldinov, K. A. Kocheshkov, Corr Mem, Acad Sci USSR, All-Union Sci Res Chem-Phar Inst imeni S. Ordzhonikidze

"Dok Ak Nauk SSSR" Vol LXXXIV, No 3, pp 527-530

This work reports the feasibility of progressive acylation of oxocompds in the presence of acid agents. Acid catalysts such as $FeCl_3$, $AlCl_3$, $ZnCl_2$, $SnCl_4$, P_2O_5 could not be used, because of their violent reaction; but boron fluoride, which has a milder action and is more stable toward hydrolizing

225T6

agents, led to the desired goal. It was shown that, in the progressive acetylation of oxocompds, all stages could be reached through the aid of acid agents, particularly boron fluoride and sulfuric acid. The C-acylation of oxocompds, by means of BF_3, was achieved both immediately and by stages of the isomerization of O-acylate, thus leading to the assumption that even during the direct C-acylation process, the reaction takes place through an intermediate formation of O-acylate of enol, which is isomerized subsequently to C-acylate.

(BA-A11 My '53:595)

225T6

KOCHESHKOV, K. A.

KOCHESHKOV, K. A.

USSR/Chemistry - Triacylnitrogen

"Preparation of Compounds of the Triacylinitogen Type," N. V. Smirnova, A. P. Skoldinov, K. A. Kocheshkov, Corr Mem, Acad of Sci SSSR, All-Union Sci Res Chem-Phar Inst imeni S. Ordzhonikidze

"Dok Ak Nauk SSSR" Vol 84, No 4, 1952 pp 737-740

Ketene reacts with amides in the presence of an inorg acid to form N-acetyl substituted amides. Further action of ketene on the diacetyl amide leads to the formation of compound having 3 acetyl groups on one nitrogen atom. This compd is a representative of a new class of compds of the type $N(COR)_3$ where R is an aliphatic radical. Nine compds of this series were prepd and tabulated with their phys consts.

237T10

PANOV, E.N.; KOCHESHKOV, K.A.

New fundamental class of simplest organic compounds of lead, $ArPbX_3$.
Doklady Akad. Nauk S.S.S.R. 85, 1037-40 '52. (MLRA 5:9)
(CA 47 no.13:6365 '53)

No. 5

PANOV, E.M.; KOCHESHKOV, K.A.

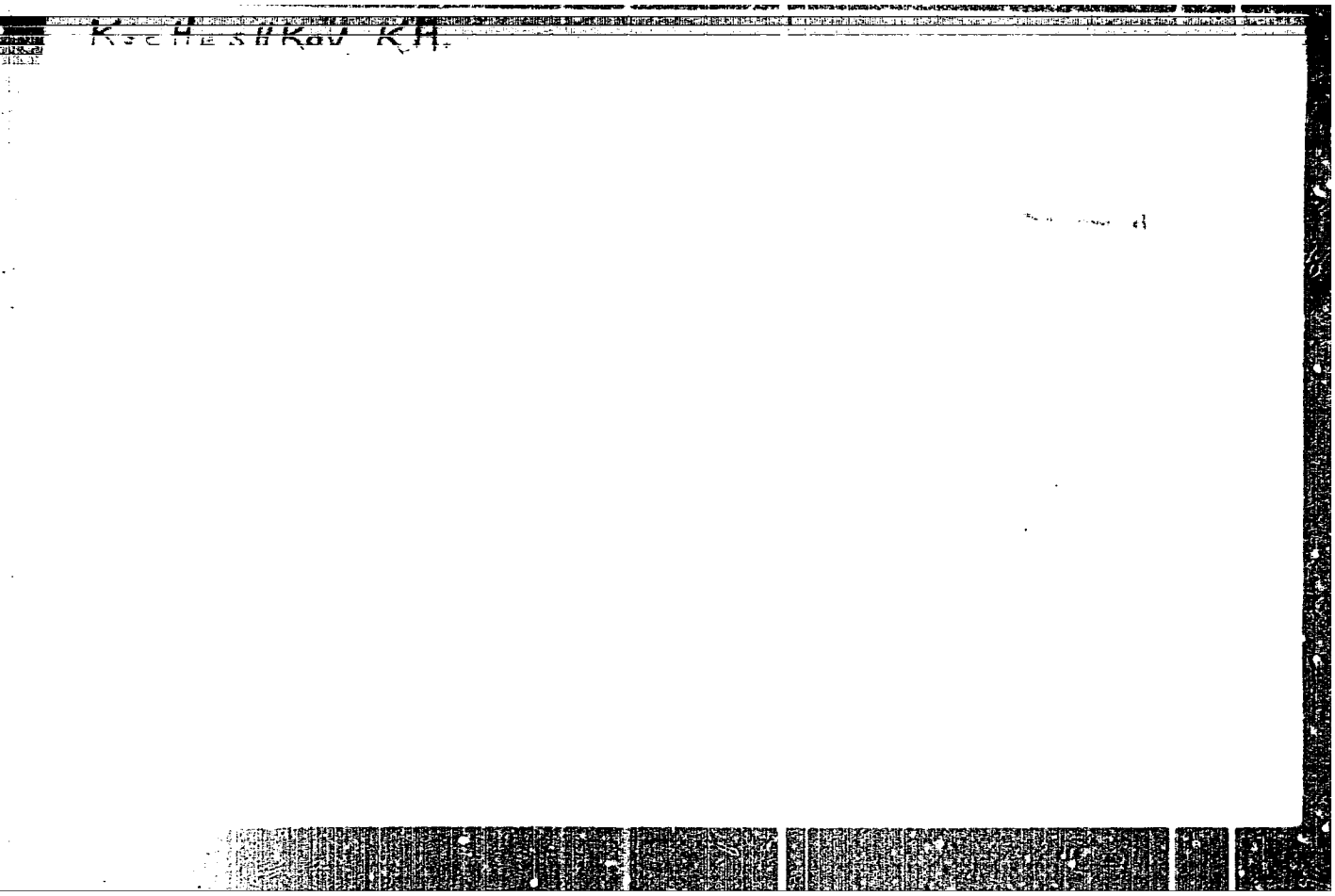
Metalloörganic analogs of benzoic and p-toluic acids. Doklady Akad. Nauk S.S.S.R. 85, 1293-5 '52. (MLRA 5:9)
(CA 47 no.14:6887 '53)

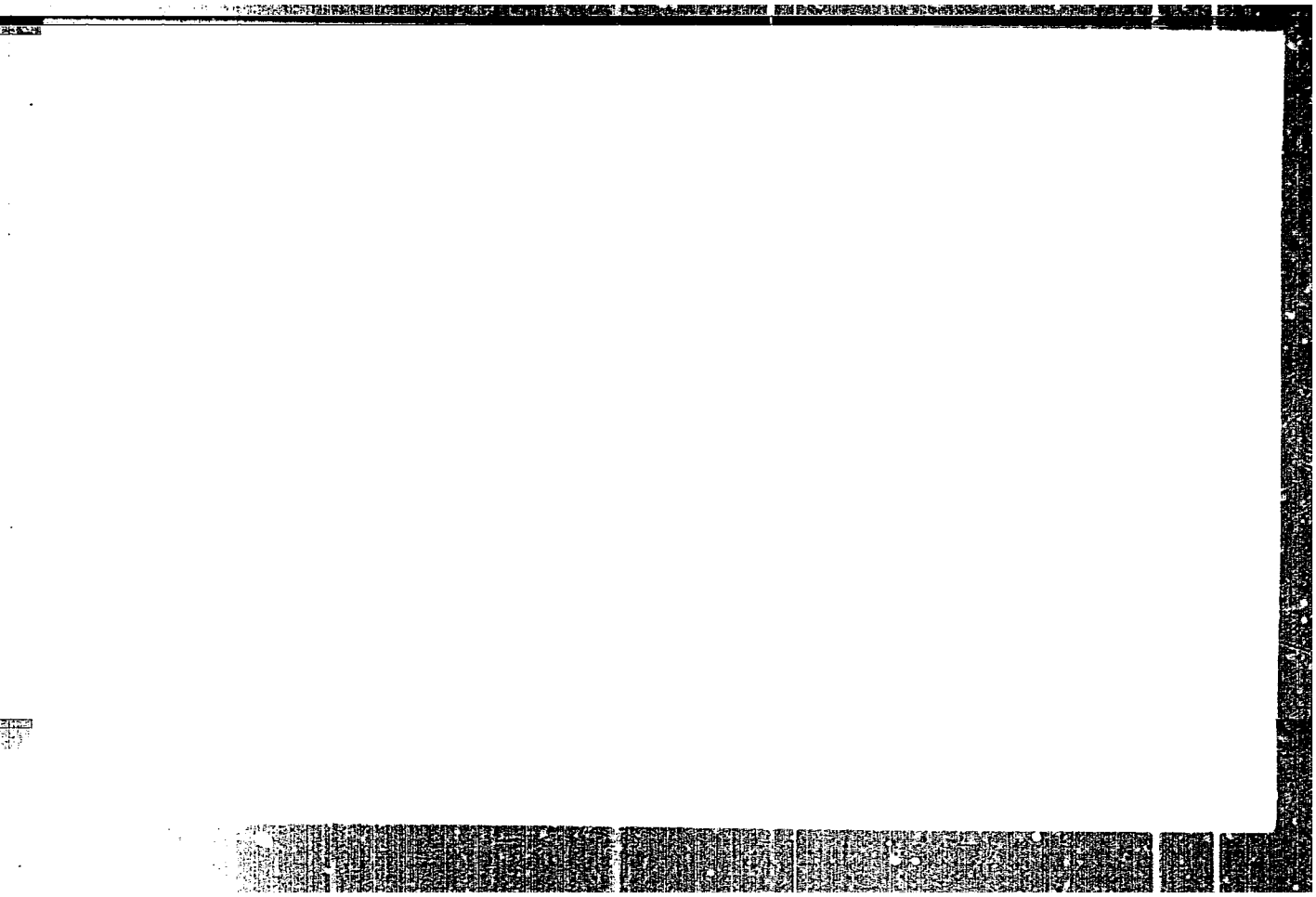
PANOV, Ye. M.; KOCHESHOV, K. A.

Toluic Acids

Organometallic analogs of benzoic and η -toluic acids; phenyllead and η-tolyplumbonic acids. Dokl. AN SSSR 85 No. 6, 1952

Monthly List of Russian Accessions, Library of Congress, December 1952. UNCLASSIFIED.





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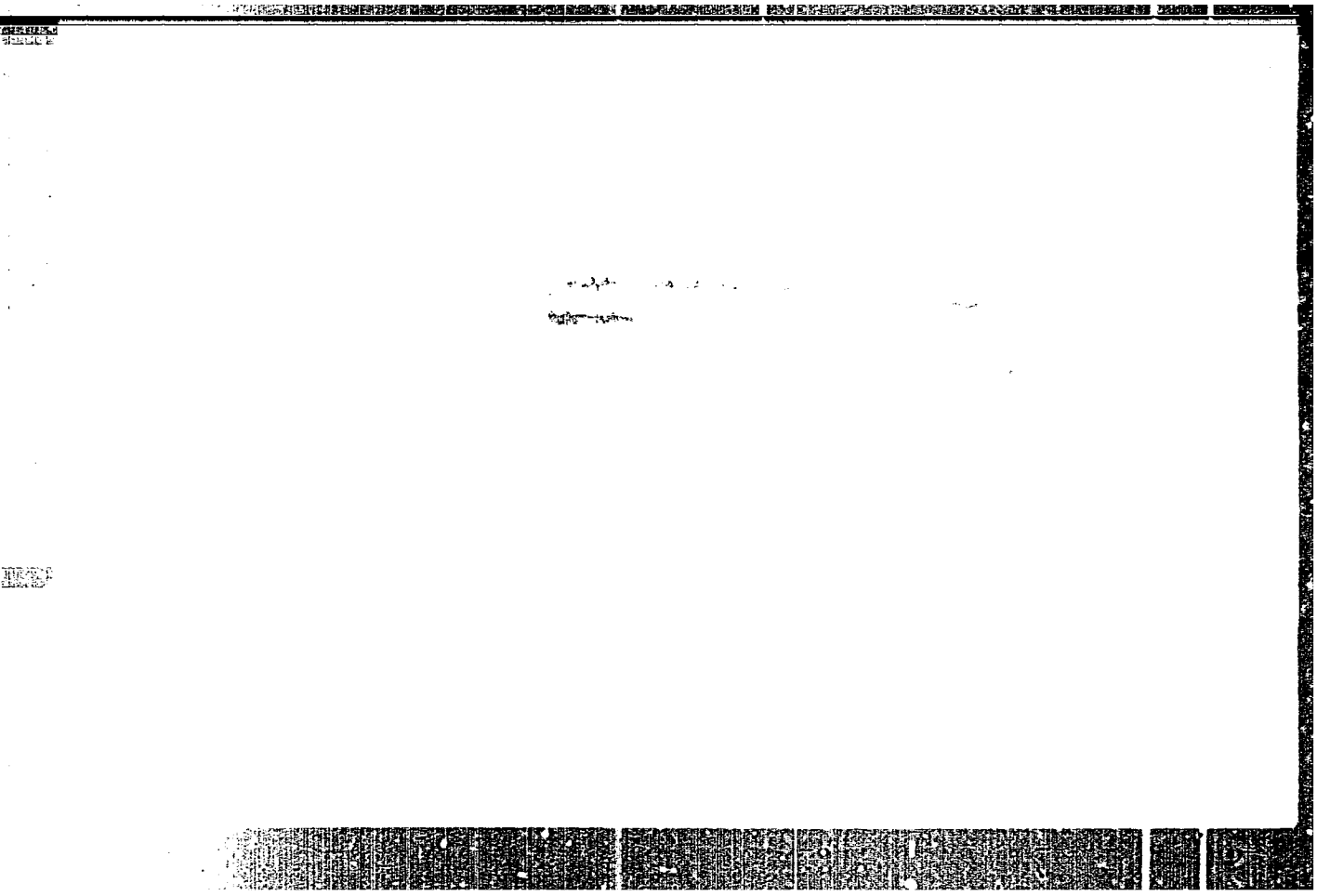
KOCHESHKOV, K. A. and ZASOSOV, V. A.

Organic Lithium Compounds in Their Reactions with Organic Tin- and Lead Compounds of the Aromatic Series Containing the Halogen in the Ring. II., Page 285, Sbornik statey po obshchey khimii (Collection of Papers on General Chemistry), Vol I, Moscow-Leningrad, 1953, pages 762-766

Laboratory of Experimental Chemotherapy of Infectious Diseases, All Union Sci Res Chemico-Pharmaceutical Inst imeni S. Ordzhonikidze



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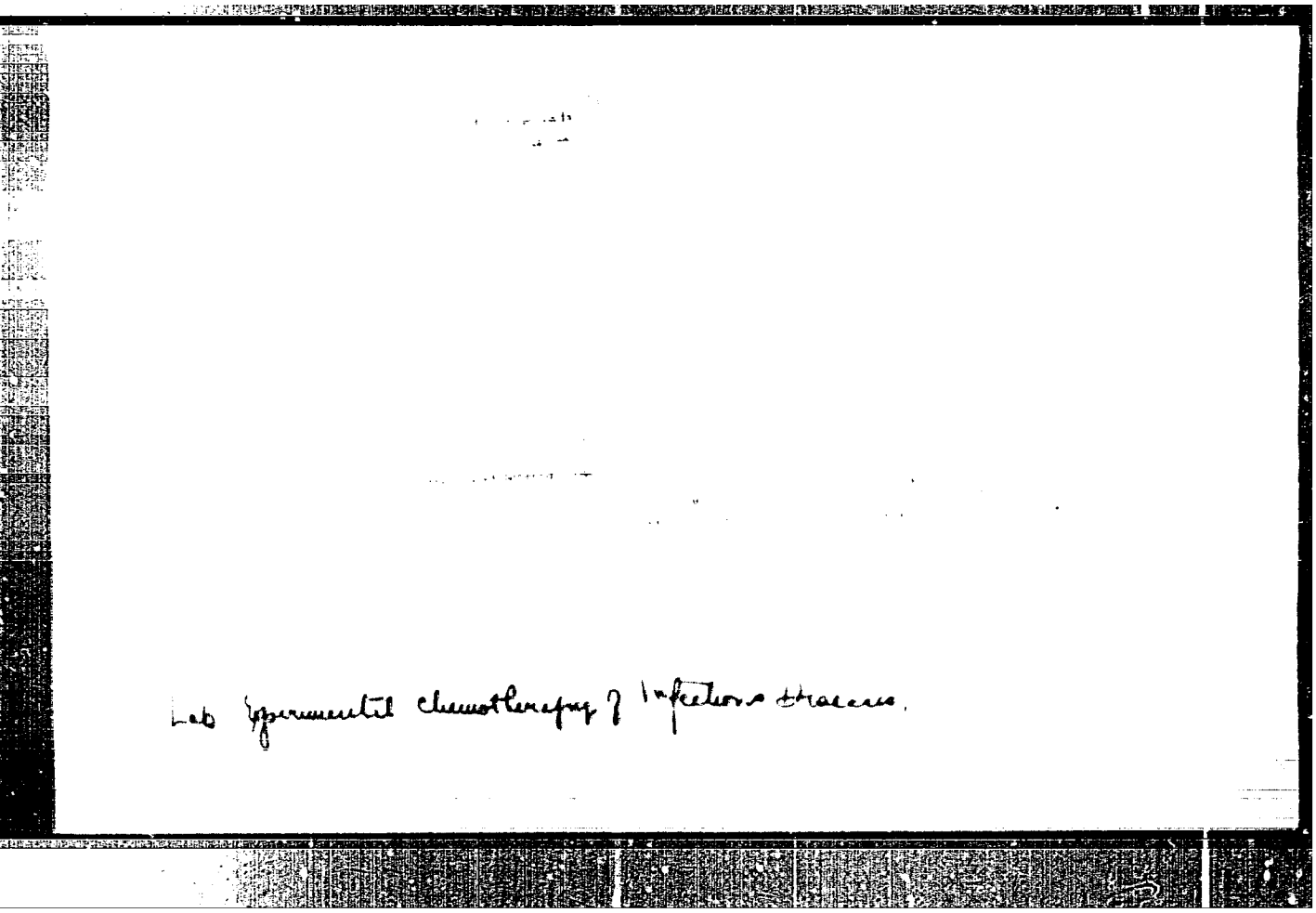

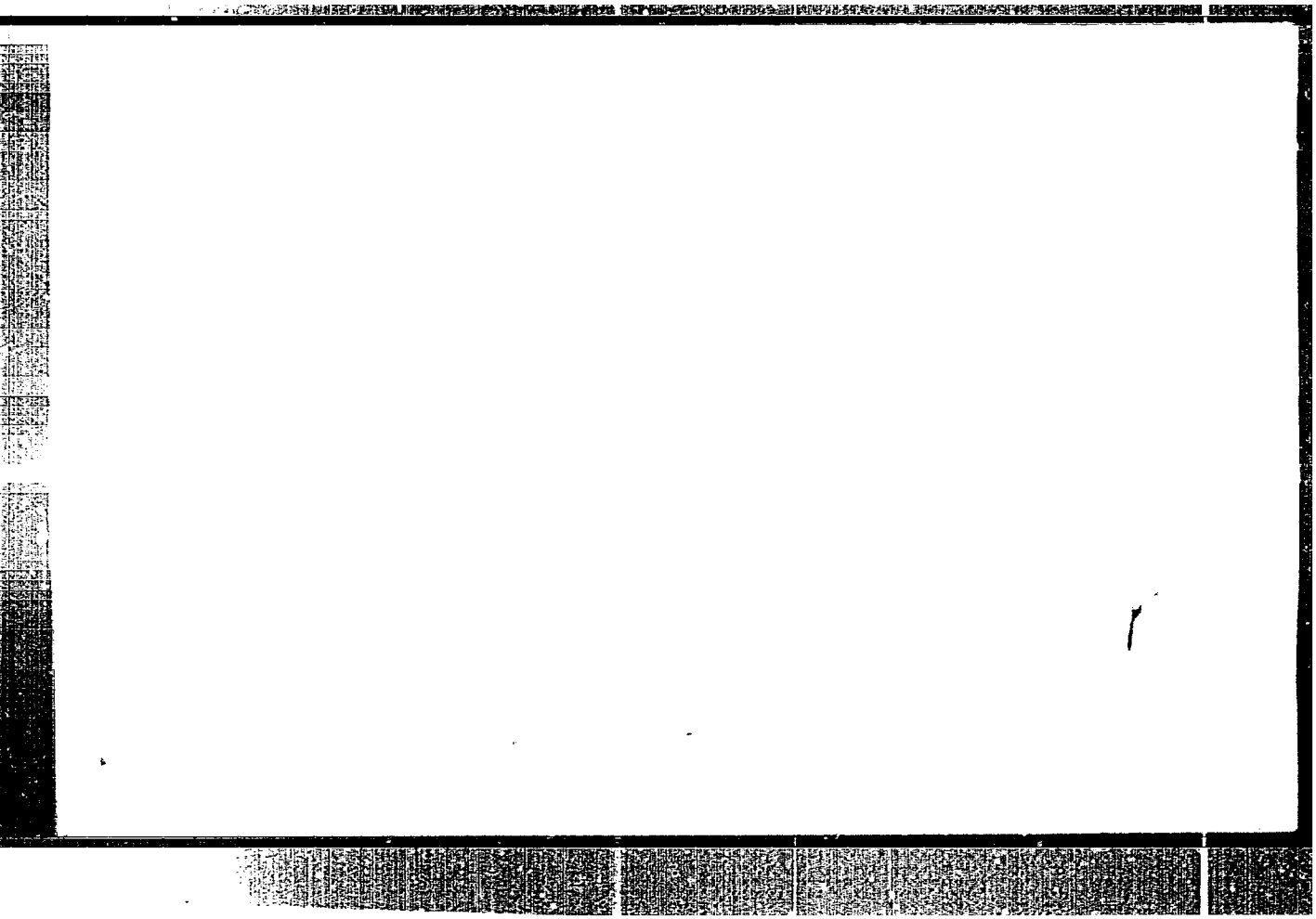

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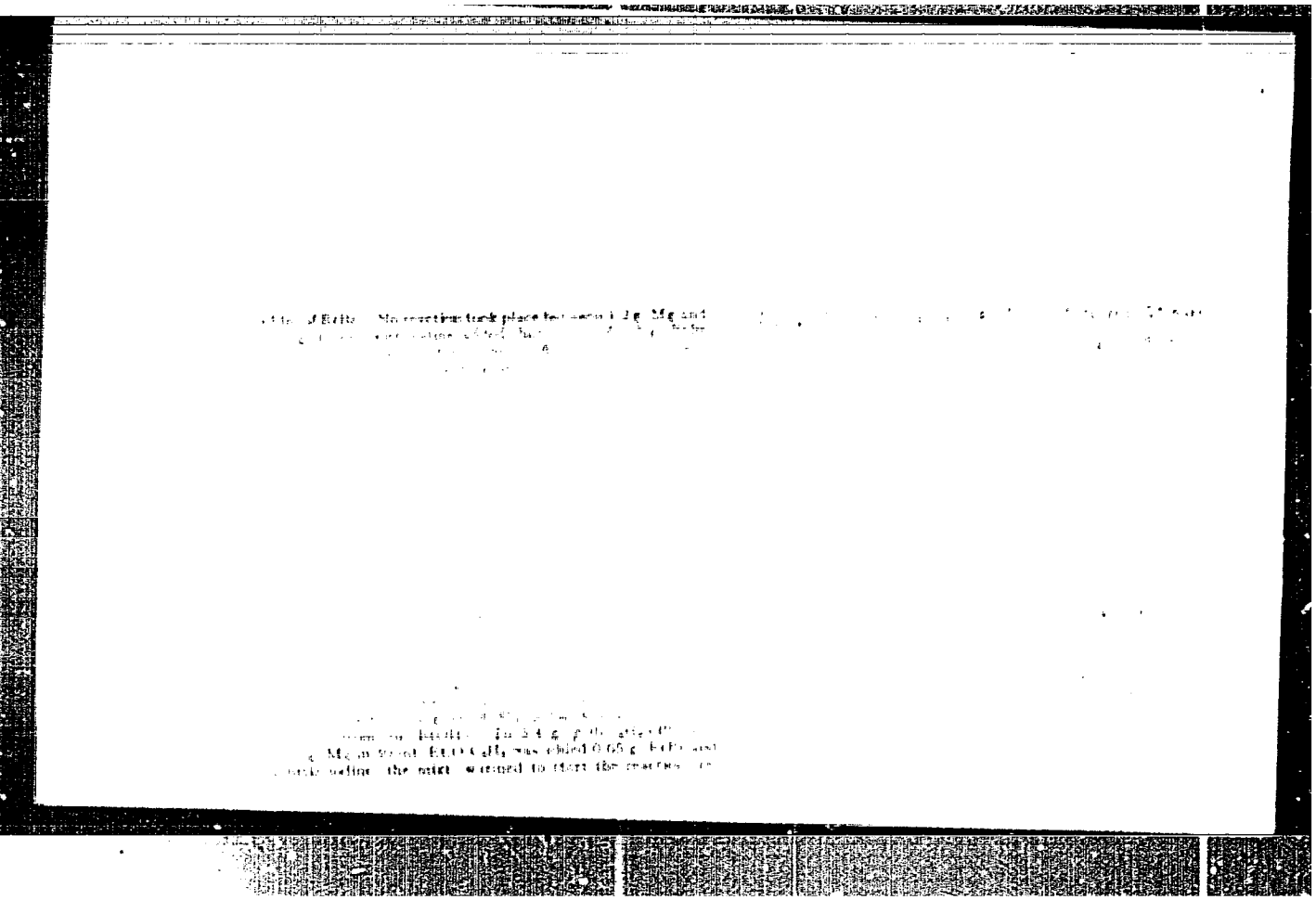
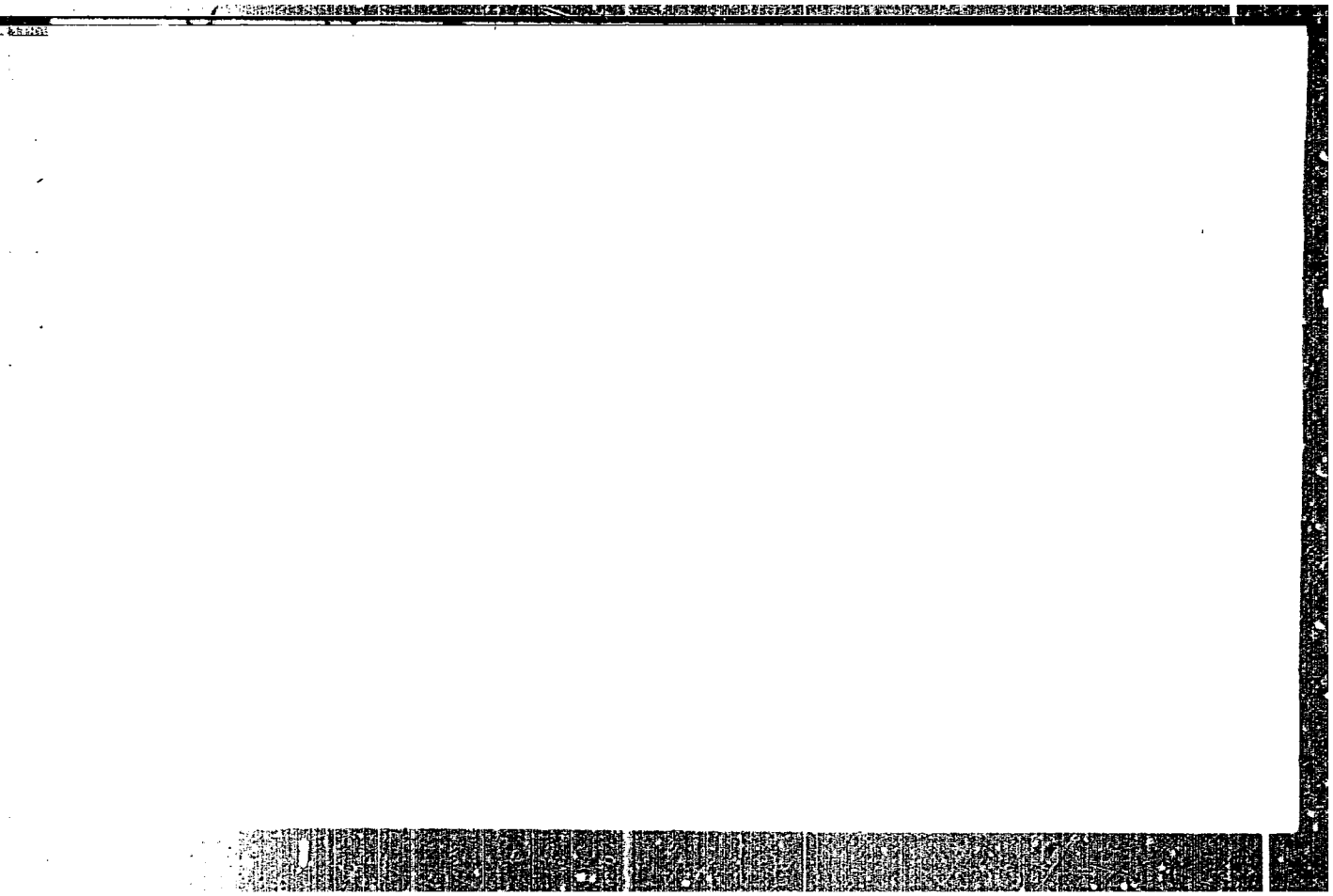


KOCHESHKOV, K. A. and ZASOSOV, V. A.

On the Influence of the Structure of Some Halogen-Containing Organo-Elemental Compounds upon Their Reaction with Magnesium. III. Synthesis of Carboxylic Acids Containing Silicon or Tin in Their Molecules, Page 290, Sbornik statey po obshchey khimii (Collection of Papers on General Chemistry), Vol I, Moscow-Leningrad, 1953, pages 762-766

Laboratory of Experimental Chemotherapy of Infectious Diseases, All Union Sci Res Chemico-Pharmaceutical Inst imeni S. Ordzhonikidze



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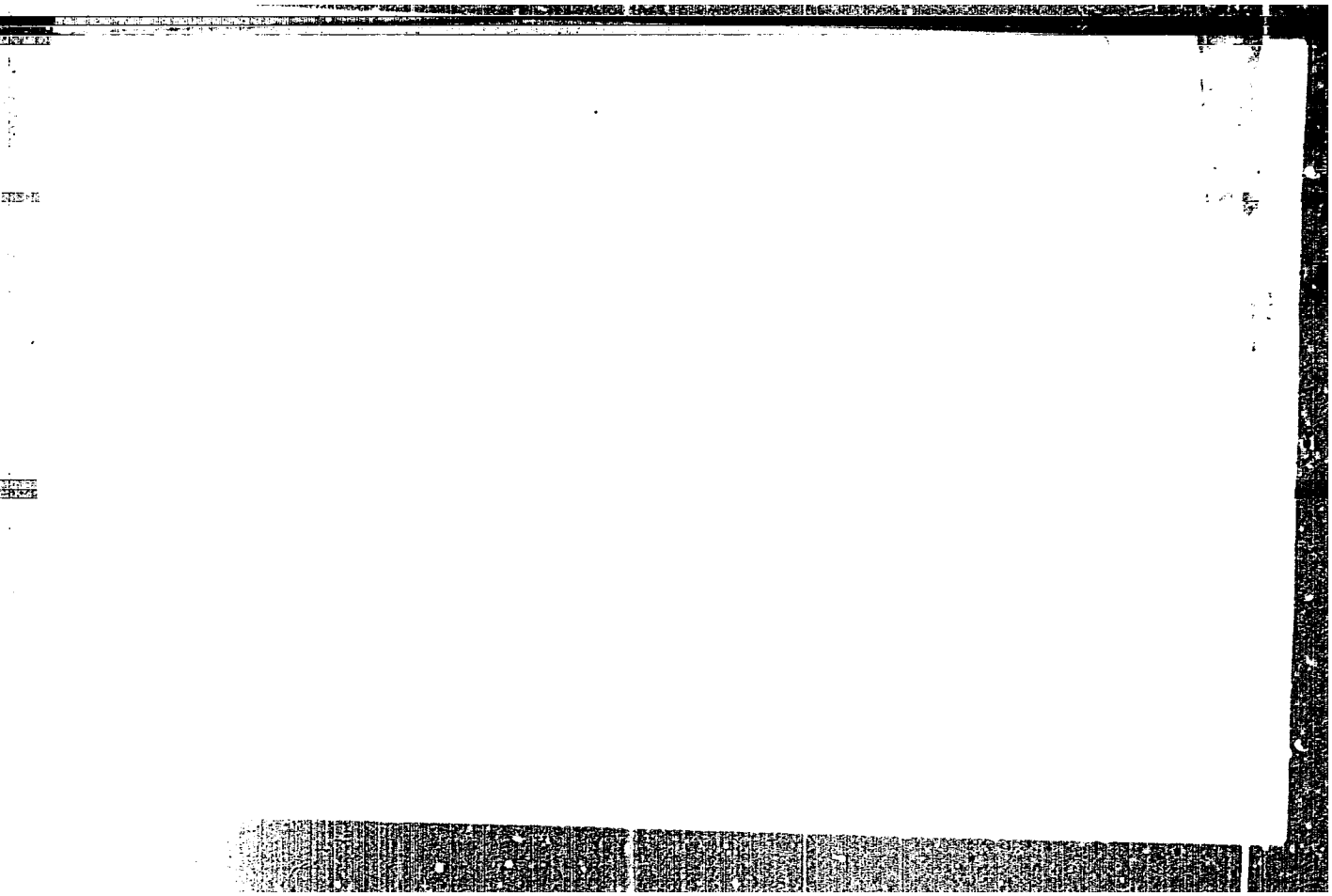


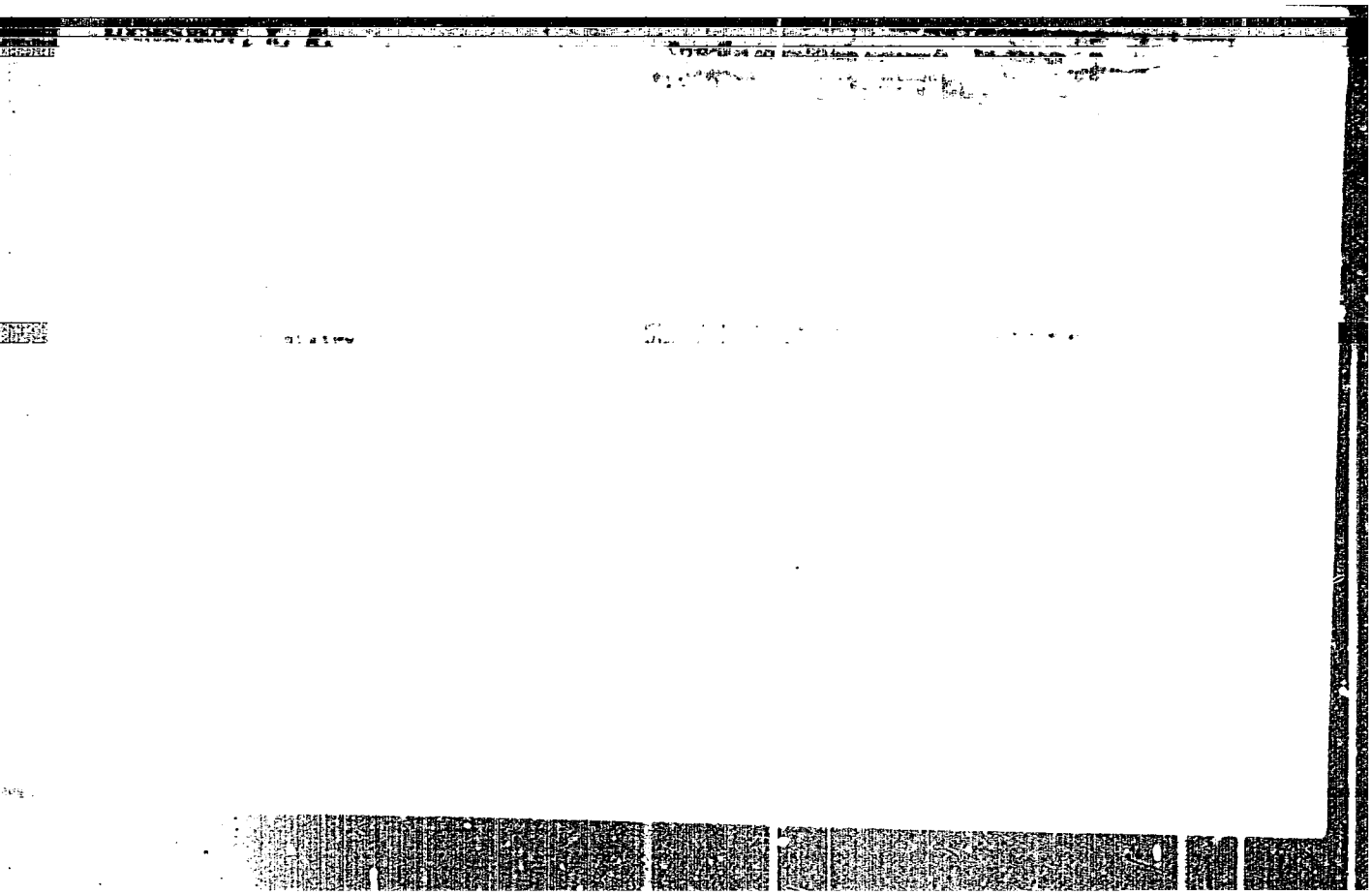
USSR/Chemistry - Lithium-Organic Compounds Mar/Apr 53

"Crystalline Lithium-Organic Compounds: Benzyllithium," T.V. Talalayeva, K.A. Kocheshkov, Phys-Chem Inst imeni L.Ya. Karpov

Iz Ak Nauk SSSR, OKhN, No 2, pp 290-293

Benzyllithium as the simplest aryl-alkyl Li compd differs from both aromatic and aliphatic Li compds by its greater reactivity, which is utilized mostly for analytical purposes. Crystalline benzyllithium was obtained by reacting tribenzylantimony with ethyllithium in a pentane-benzene soln. Its properties were investigated.

250829



KOCHESHKOV, K. A.

ZELINSKIY, N.D., akademik; KOCHESHKOV, K.A., redaktor; KAVERZNEVA, Ye.D., doktor khimicheskikh nauk, redaktor; LEVINA, R.Ya., redaktor; YUR'YEV, Yu.K., redaktor.

[Collected works] Sobranie trudov. Moskva, Izd-vo Akademii nauk SSSR. Vol. 1. 1954. 514 p. (MLRA 7:8)

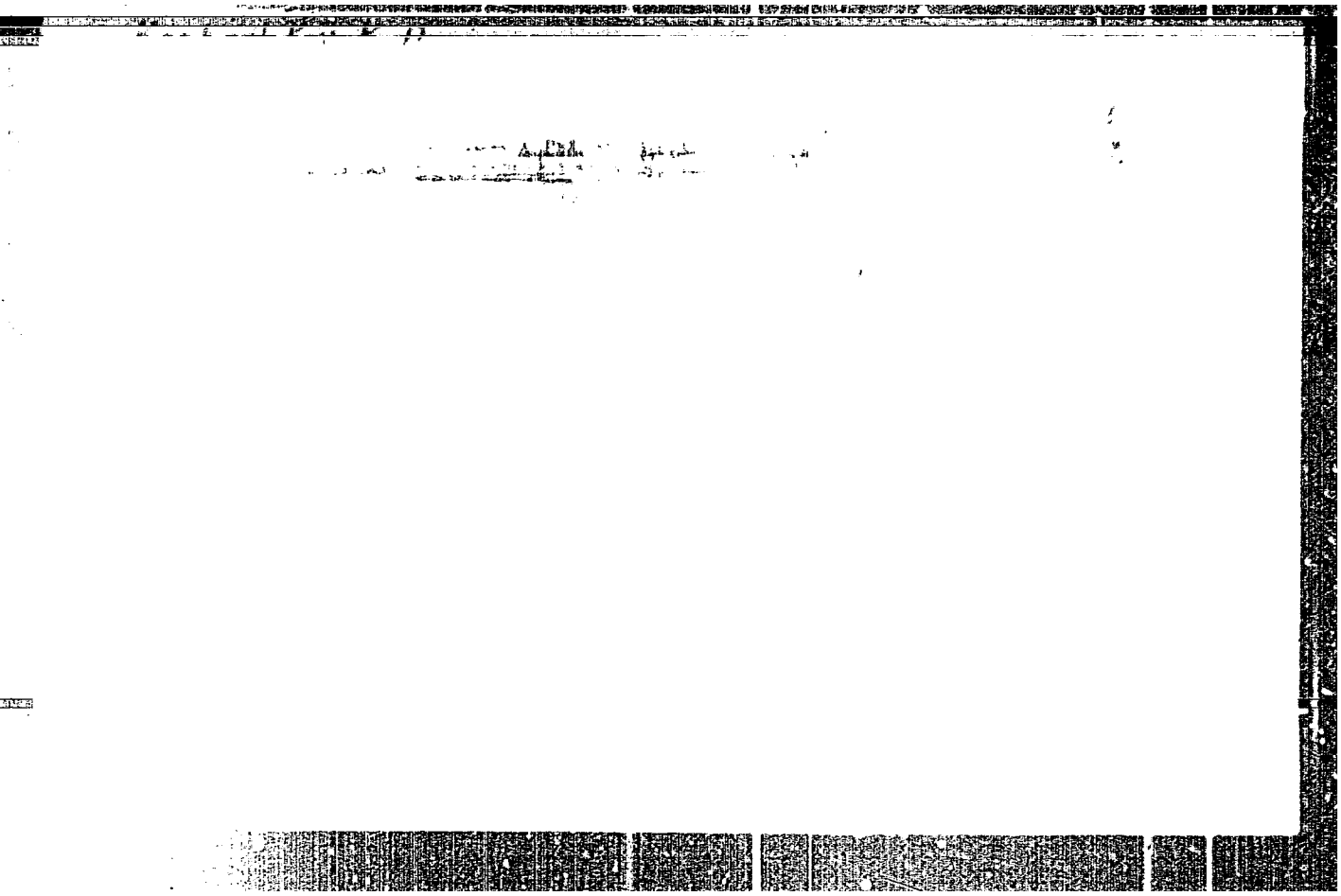
1. Chlen-korrespondent AN SSSR (for Kocheshkov)
(Chemistry--Collected works)

KOCHESHKOV, K.A.

ZELINSKIY, Nikolay Dmitriyevich, 1861-1953 [deceased] KAZANSKIY, B.A., akademik; BALANDIN, A.A., akademik; KOCHESHKOV, K.A.; SHUYKIN, N.I.; KAVTSZHEVA, Ye.D, doktor khimicheskikh nauk; LEVINA, R.Ya., doktor khimicheskikh nauk; PLATE, A.F., doktor khimicheskikh nauk; RUBINSHTEYN, A.M., doktor khimicheskikh nauk; TUR'YEV, Yu.K., doktor khimicheskikh nauk; KISELEVA, A.A., tekhnicheskiy redaktor.

[Collected works] Sobranie trudov, Moskva, Izd-vo Akademii nauk SSSR. Vol. 2. 1955. 743 p. (MLRA 8:11)

1. Chlen-korrespondent AN SSSR(for Kocheshkov and Shuykin)
(Hydrocarbons) (Petroleum)



KOCHESHKOV, K.A.

ZELINSKIY, N.D.; KAZANSKIY, B.A., akademik; BALANDIN, A.A., akademik; KOCHESHKOV, K.A.; SHUYKIN, N.I.; KAVERZNEVA, Ye.D., doktor khimicheskikh nauk; IOFFE, B.V., doktor khimicheskikh nauk; PLATE, A.F.; doktor khimicheskikh nauk; RUBINSHTEYN, A.M. doktor khimicheskikh nauk; YUR'YEV, Yu.K., doktor khimicheskikh nauk.

[Collected works] Sobranie trudov. Moskva, Izd-vo Akad.nauk SSSR. Vol. 3 1955 719 p. (MLRA 8:8)

1. Chlen-korrespondenty AN SSSR (for Kocheshkov, Shuykin).

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No. 1, 1957, 953

Author: Kocheshkov, K. A., and Panov, Ye. M.

Institution: Academy of Sciences USSR

Title: Dearylation of Ar_2PbX_2 as a Method for the Synthesis of a New Class of Compounds $ArPbX_3$

Original Periodical: Izv. AN SSSR, Section on Chemical Sciences, 1955, No 4, 711-717

Abstract: Compounds of the type $C_6H_5Pb(OCOR)_3$ (R = CH_3 (I); R = $(CH_3)_2CH$ (II); R = C_6H_5 (III)) have been prepared by the dearylation of organo-lead compounds of the type $(C_6H_5)_2Pb(OCOR)_2$ with mercuric salts in organic acid solutions. The compound I can be prepared from 1.92 gms $Hg(OCOCH_3)_2$ in 40 ml glacial CH_3COOH and 2.88 gms diphenyllead diacetate (24 hours at 20°); the $C_6H_5HgOCOCH_3$ which is formed is converted to C_6H_5HgCl by the addition of 1.28 ml of 4.7 N HCl in alcohol, followed by filtration. The filtrate is evaporated in a vacuum-desiccator over KOH. The residue (3.63 gms) is dissolved in 50 ml

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USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 954

Author: Kocheshkov, K. A., and Panov, Ye. M.

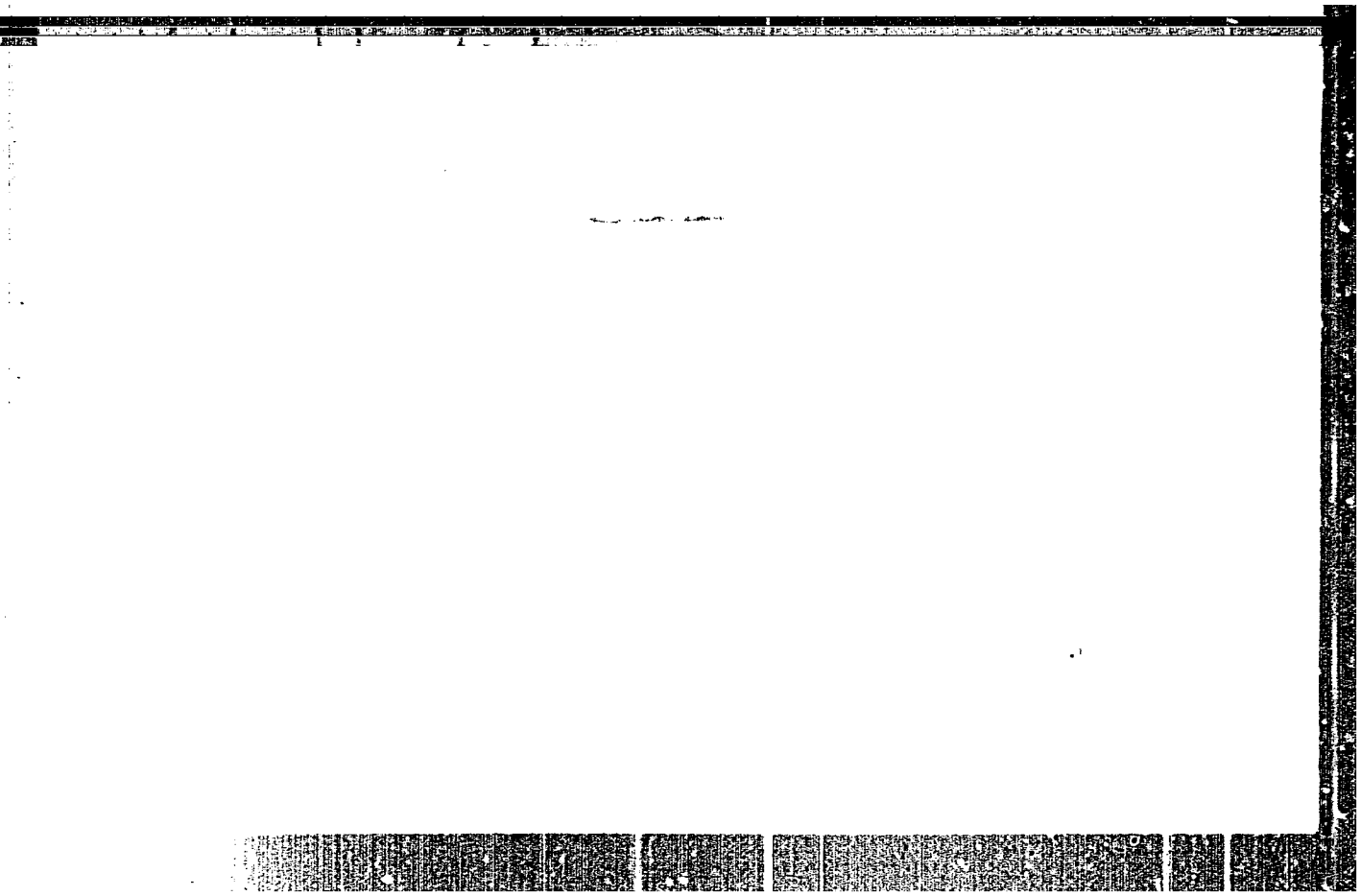
Institution: Academy of Sciences USSR

Title: Compounds of the Type Ar_2PbX_2 and $ArPbX_3$ of the Paratolyl Series

Original Periodical: Izv. AN SSSR, Section on Chemical Sciences, 1955, No 4, 718-722

Abstract: A method has been developed for synthesizing compounds of the type $Ar_2Pb(OCOR)_2$ (I) from Ar_2Pb in II [Tr. note: II presumably refers to preceding abstract] (Ar = p-$CH_3C_6H_4$); compounds of the type I with R = CH_3 (Ia) and R = $(CH_3)_2CH$ have been prepared. Ia was used in the synthesis of $ArPb(OCOCH_3)_3$ (III), which was converted to p-tolyllead trimethacrylate (IV); 7.5 gms II are gradually dissolved in 75 ml concentrated HNO_3. The reaction mixture is heated for several minutes and then cooled; the precipitate of $Ar_2Pb(NO_3)_2$ is sucked off, washed with water, and redissolved in 80 ml alcohol and alcoholic KOH (2.2 gms in 25 ml), which results in conversion to Ar_2PbO (V); the yield

Card 1/2



APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723510010-2"

OLUSHKOVA,V.P.; KOCHESHKOV,K.A.

Reaction of the synthesis of thallium aromatic and heterocyclic series. Dokl. AN SSSR 103 no.4:615-618 Ag'55. (MLRA 8:11)

1. Chlen-korrespondent Akademii nauk SSSR (for Kocheshkov) 2. Fiziko-khimicheskiy institut imeni L.Ya.Karpova
(Thallium organic compounds)

TALALAYEVA, T.V.; KOCHESHKOV, K.A.

Structure of some crystalline organolithium compounds. Dokl.AN SSSR 104 no.2:260-263 S '55. (MLRA 9:2)

1.Chlen-korrespondent AN SSSR (for Kocheshkov). 2.Fiziko-khimicheskiy institut imeni L.Ya.Karpova.
(Lithium organic compounds)

TALALAYEVA, T.V.; NAD', M.M.; KOCHESHKOV, K.A.

Etherates and dioxanates of lithiumorganic compounds. Dokl. AN SSSR 109 no.1:101-104 Jl-Ag '56. (MLRA 9:10)

1. Chlen-korrespondent Akademii nauk SSSR (for Kocheshkov).
2. Fiziko-khimicheskiy institut imeni L.Ya. Karpova.
(Lithium organic compounds)

PANOV, Ye.M.; LODOCHNIKOVA, V.I.; KOCHESHKOV, K.A.

A new method for the production of $ArPbX_3$ lead organic compounds. Dokl.AN SSSR 111 no.5:1042-1044 D '56. (MLRA 10:2)

1. Chlen-korrespondent AN SSSR, (for Kocheshkov) i Fiziko-khimicheskiy institut im. L.Ya. Karpova, Sverdlovskiy gosudarstvennyy meditsinskiy institut.
(Lead organic compounds)

KOCHESHKOV, K. A.

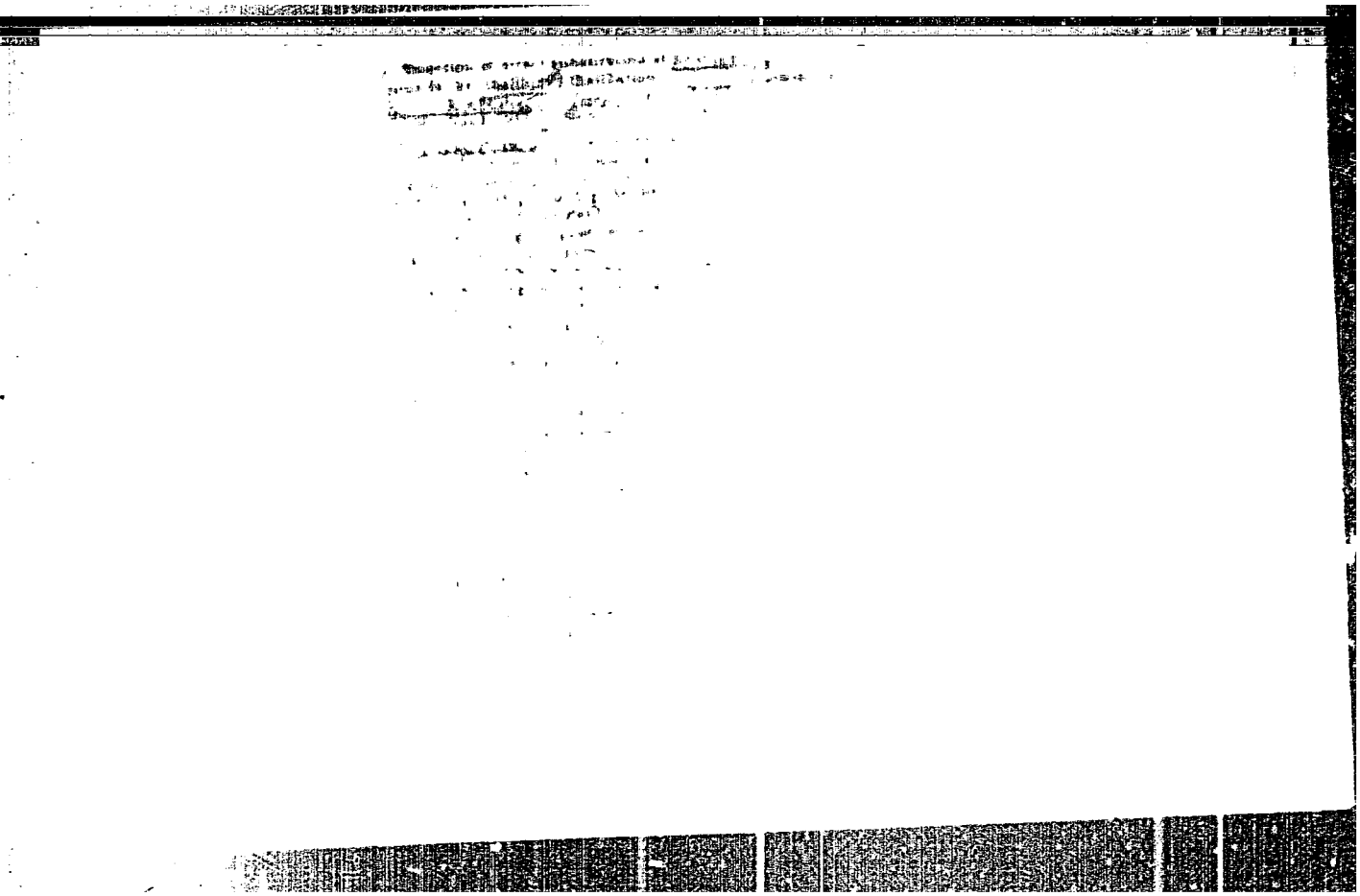
"Research in the Field of Metallization of Aromatic and Heterocyclic Compounds," a paper submitted at the 16th International Congress of Pure and Applied Chemistry, Paris, 18-24 July 1957.

KOCHESHKOV AT M

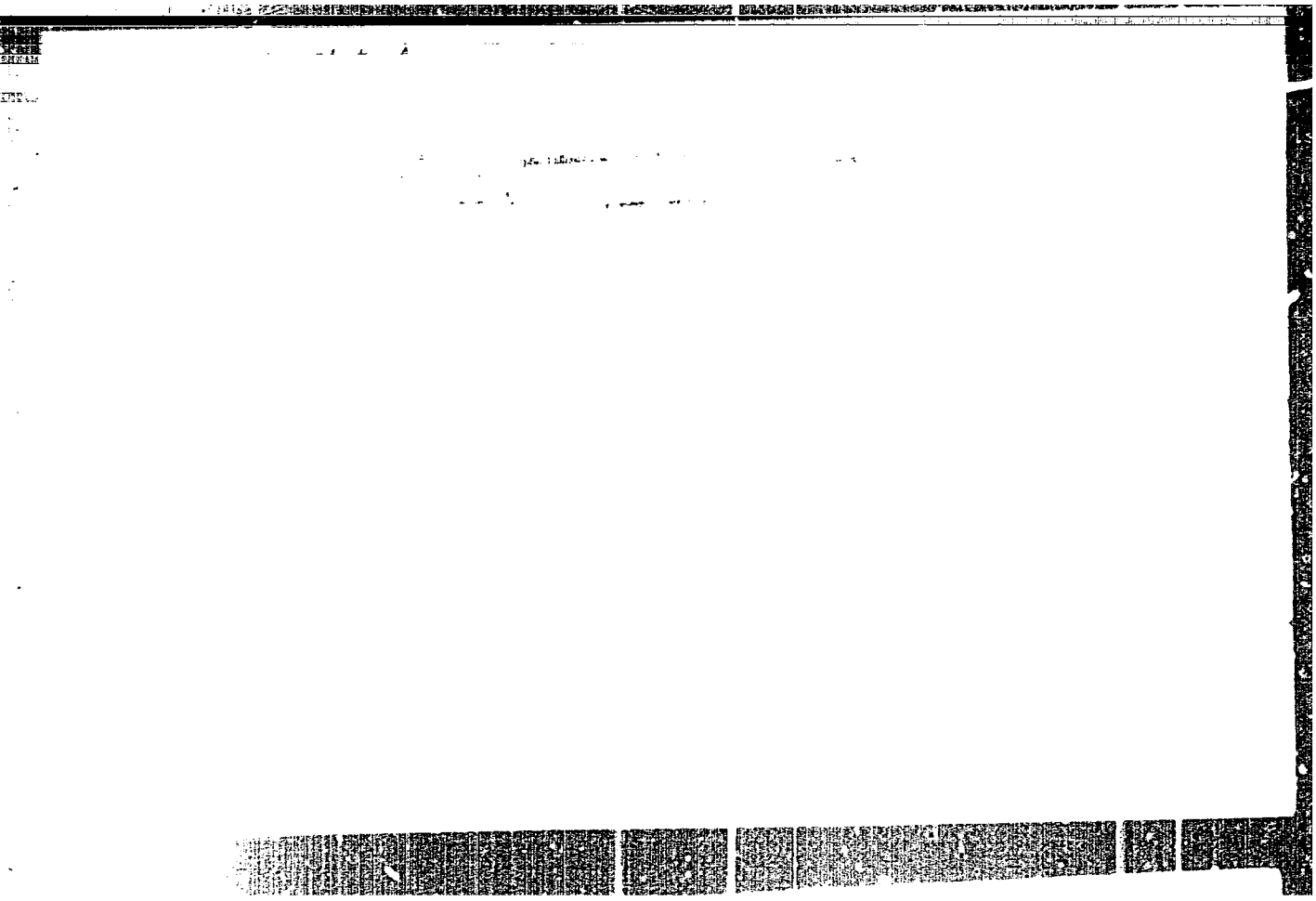
NAD', M.M.; KOCHESHKOV, K.A.

Selective reduction of polyhalogenated methanes by sodium-boronhydride. Izv. AN SSSR. Otd. khim. nauk no.9:1122-1123 S '57. (MIRA 10:12)

1. Fiziko-khimicheskiy institut im. L.Ya. Karpova AN SSSR.
(Reduction, Chemical) (Methane) (Sodium borohydride)



APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723510010-2"



APPROVED FOR RELEASE: 09/18/2001 CIA-RDP86-00513R000723510010-2"

Kocheshkov, K. A.

62-11-16/29

AUTHORS: Glushkova, V. P., Kocheshkov, K. A.

TITLE: Introduction of Thallium Into Dibenzofuran(Tallirovaniye dibenzofurana).

PERIODICAL: Izvestiya AN SSSR, Otdelenie Khimicheskikh Nauk, 1957, Nr 11, pp. 1391-1392 (USSR)

ABSTRACT: The introduction of thallium into the amisol and tiophen by the aid of salts of organic acids of the trivalent thallium was carried out by the authors (reference 1) and it was shown that this leads towards thalliumorganic compounds of the class $ArTJX_2$ and not - as maintained by the American authors (reference 2) - towards compound of the class Ar_2TJX. Here the behaviour of the dibenzofuran with regard to the salts of organic acids was compared with that with regard to the halogen-salts of the trivalent thallium. It was shown that the introduction of thallium as also in previous cases leads to the class $ArTJX_2$.

Furthermore it is shown that the introduction of thallium with regard to oxygen does not lead to the para-position but to the orthoposition. There are 7 references, 2 of

Card 1/2

62-11-16/29

Introduction of Thallium Into Dibenzofuran.

which are Slavic.

ASSOCIATION: Physico-Chemical Institute imeni L. Ya. Karpov (Fiziko-khimicheskiy institut im. L. Ya. Karpova).

SUBMITTED: July 5, 1957.

AVAILABLE: Library of Congress

Card 2/2

1-Naphthyl Derivatives of the Class ArfbX, 62-12-10/20

are Slavic.

ASSOCIATION: Physical-Chemical Institute imeni L.Ya.Karpov and State Medical Institute Sverdlovsk (Fiziko-khimicheskiy institut im. L.Ya.Karpova i Sverdlovskiy gosudarstvennyy meditsinskiy institut).

SUBMITTED: July 5, 1957

AVAILABLE: Library of Congress

Card 2/2 1. α-Naphthyl derivatives

Kocheshkov, K. A.

AUTHORS: Glushkova, V. P., and Kocheshkov, K. A., Corresponding Member AN SSSR. 20-2-19/50

TITLE: A New Method of Synthesis for Organothallium Compounds of the $ArTlX_2$ Class (Novyy metod sintesa talliyorganicheskikh soyedineniy klassa $ArTlX_2$).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 2, pp. 253-255 (USSR)

ABSTRACT: The absence of reliable production methods represents a considerable gap in the chemistry of the above-mentioned compounds and therefore the $ArTlX_2$-class is not easily accessible. The Challenger method (over organoboron compounds) consists of several stages and besides leads to secondary processes. Thus some authors described $ArTlX_2$ (X-haloid) as colored substances, when produced according to Challenger, whereas in reality they are colorless (see below). In this paper the authors for the first time described the production method of $ArTlX_2$ (X-rest of an organic acid) with the use of organic acids of trivalent thallium in a reaction with organomercury compounds. The reaction which rapidly proceeds

Card 1/3

[illegible] haloid did here not lead to the formation of color either. Thus the color described in publications is the result of admixtures. An experimental part with the usual data follows.

Card 2/3

[illegible] Method of Synthesis for Organothallium Compounds of the $ArTlX_2$-Class 20-2-19/50

There are 6 references, 4 of which are Slavic

ASSOCIATION: Physico-chemical Institute imeni L. Ya. Karpov Fisiko-Khimicheskiy institut im. L. Ya. Karpova).

SUBMITTED: May 10, 1957

AVAILABLE: Library of Congress

Card 3/3

[redacted], A. A., [redacted], T. A., [redacted], O. A., [redacted], T. K., and [redacted], T. I.,

" High Polymers Obtained Using Organometallic Complexes Containing Lithium and Titanium," paper No. N7, submitted at the International High-Polymer Conference, Nottingham, July 21-24, 1958.

Akademiya Nauk SSSR, Leninskiy Prospekt 14, Moscow, USSR

Translation E 3,109,661

KOCHESHKOVA K. A.

64-1-18/19

AUTHOR: Malyusov, V. A.

TITLE: Scientific Conference at the Institute for Physical Chemistry Imeni L. Ya. Karpov (Nauchnaya konferentsiya v Fiziko-khimicheskom institute imeni L. Ya. Karpova)

PERIODICAL: Khimicheskaya Promyshlennost', 1958, Nr 1, pp. 56-56 (USSR).

ABSTRACT: At the end of November, 1957, a meeting of the scientific session of the scientific council took place in the above mentioned institute in honour of the 40th anniversary of the great socialist October Revolution. 19 contributions of the most interesting works carried out of lately in this institute were delivered. The corresponding member of the AN USSR, professor S. S. Medvedev, gave a report on the investigations of the general rules governing the emulsion polymerization. The active member of the AN USSR, professor V. A. Kargin reported on new observations in structural polymers. The corresponding member of the AN USSR, professor K. A. Kocheshkova reported on investigations in the field of organic lithium compounds. The corresponding member of the AN USSR, N. A. Kazarnovskiy,

Card 1/3

Scientific Conference at the Institute for Physical Chemistry Imeni L. Ya. Karpov

reported on peroxide compounds of the alkaline metals, professor A. I. Shatenshteyn on the isotopic reactions with deuterium in anhydrous solutions, professor P. P. Shorygin on the interaction of the substituents in molecules of organic compounds, D. N. Shirogin on the nature and effect of the hydrogen- and metal element binding, professor B. F. Ormont on the importance of the solid phases, professor G. S. Zhdanov reported on the work of the electronic computing machine "Kristall" and demonstrated it. V. L. Karpov reported on the investigations of the radiation stability of high polymers, professor V. I, Veselovskiy on the mechanism of the radiation-electrochemical processes, professor M. A. Proskurnin on the sensitization of radiation-chemical reactions, professor S. Ya. Pshezhetskiy on the oxidation of nitrogen under ionizing radiations, professor N. N. Tunitskiy on the molecule- and ionic dissociation in the mass spectrometer, A. Kh. Breger on sources of nuclear radiations, professor Ya. M. Kolotyrkin on electrochemical investigations of metals, the corresponding member of the AN USSR professor N. M. Zhavoronkov reported on the process of steady and unsteady mass transport in the absorption and rectification, professor

Card 2/3

Scientific Conference at the Institute for Physical Chemistry Imeni L. Ya. Karpov. 64-1-18/19

M. I. Temkin and L. E. Apel'baum on the chain characteristics of heterogeneous catalytic reactions and professor G. K. Boreskov reported on: "Some Questions of Catalyst Selection." There are no references.

AVAILABLE: Library of Congress.

1. Chemical research-USSR 2. Scientific research-USSR

Card 3/3

KOCHESHKOV, K.

AUTHORS: Rodionov, A., Shigorin, D., Talalayeva, T., Kocheshkov, K. (Lithium Bond) 62-1-28/29

TITLE: Letters to the Editor (Pis'ma redaktoru)

PERIODICAL: Izvestiya AN SSSR Otdeleniye Khimicheskikh Nauk, 1958, Nr 1, pp. 120-120 (USSR)

ABSTRACT: On the strength of the research of the infrared spectra of the compounds R - Li and R - O - Li the authors of this letter discovered the formation of an intermolecular lithium binding $\overset{-\delta}{C}\overset{+\delta}{—}Li....\overset{-\delta}{C}\overset{+\delta}{—}Li....$ and $\overset{-\delta}{O}\overset{+\delta}{—}Li....\overset{-\delta}{O}\overset{+\delta}{Li}...$ A comparison of the spectra of the vapors, solvents, and powders in vaseline oil as well as an analysis of the kind of oscillation of the molecules made possible the precise determination of the frequency of the valent oscillations of the groups C--Li (of the free and those taking part in the formation of the lithium binding; see table). The intermolecular lithiumbinding $\overset{-\delta}{-C}...\overset{+\delta}{Li}-$ is constant. With the binding $\overset{+\delta}{-Li}...\overset{-\delta}{O}-$ the latter is, however, still more stable. The formation of especially resistent intermolecular lithium bindings has to be traced back to the peculiarity of the atom of the lithium: Small

Card 1/2

radius, comparatively small ionization potential, better possibility of utilizing the -orbit. All this makes possible a immediate more and more active taking part of its electron in the intermolecular interaction than is the case with the hydrogen atom. There is 1 table.

ASSOCIATION: Physicochemical Institute imeni L. Ya. Karpov (Fiziko-khimicheskiy institut imeni L. Ya. Karpova).

SUBMITTED: December 20, 1957

AVAILABLE: Library of Congress

1. Lithium-Molecular structure 2. Vaseline oil spectra-Analysis
3. Infrared spectra-Applications