GRABLEVSKIY, V.N.; KULISH, Ye.Yo.; MATYUSHINA, N.A.; POPOVA, G.L.; POTAPOV, S.P.; SAVITSKIY, P.S.; TEREKHOVA, V.N.; FRADKIN, G.M.; LABAZNOV, V.I., red.; VLASOVA, M.A., tekhn.red.

[Isotopes, radiation sources, and radioactive materials; a catalog] Izotopy, istochniki izlucheniia i radioaktivnye materialy; katalog. Sost. avtorskim kollektivom: V.N.Grablevskii i dr. Moskva, Izd-vo Glav.uprav.po ispol'zovaniiu atomnoi energii pri Sovete Ministrov SSSR, 1959. 269 p. (MIRA 12:12)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye po ispol'zovaniyu atomnoy energii.
(Radioactive substances)

SAVITSKIY, Ye. M.; TYREKHOVA, V.P.; KHOLOPOV, A.V.

Chromium recrystallization diagram. Dokl. AN SSSR. 109 no.4:794-795 Ag 1956. (MLRA 9:10)

1. Institut metallurgii imeni A.A. Baykova Akademii nauk SSSR. Predstavleno akademikom I.P. Bardinym.
(Chromium--Metallography)

TERNKHOVA, V.M.

Changes in the lungs in tuberculous meningitis in adults. Sov.med. 21 no.1:88-94 Ja '57. (MLRA 10:6)

1. Iz kafedry tuberkuleza (zav. - prof. I.Ye.Kochnova) II Moskovskogo meditsinskogo instituta imeni I.V.Stalina.

(TUBERCULOSIS, MENINGEAL, pathol.
lungs)
(LUNGS, pathol.
in meningeal tuberc.)

KOCHNOVA, I.Ye., prof.; MIKHAYLOVA, G.N.; TEREKHOVA, V.R.; ROZMAINSKAYA, Z.N.; MALOVA, M.V.; KISLYAKOVA, N.V.

Tuberculosis vaccination in adult subjects with a positive tuberculin reaction. Sov.med. 23 no.12:58-63 D '59. (MIRA 13:4)

1. Iz kafedry tuberkuleza (zaveduyushchiy - prof. I.Ye. Kochnova) II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.
(BCG VACCINATION)

137-58-6-11673

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 64 (USSR)

AUTHORS: Rabinovich, A.G., Terekhova, V.S.

TITLE: The Influence of the Rate of Decarburiation of the Metal Bath During the Working Period on the Saturation of the Metal with Gas (Vliyaniye skorosti obezuglerozhivaniya metallicheskoy vanny v period dovodki na gazonasyshchennost' metalla)

PERIODICAL: Byul. nauchno-tekhn. inform. Ukr. n.-i. in-t metallov, 1957, Nr 3 pp 22-32

ABSTRACT: Results are adduced for 70 heats run in 125-, 185-, and 370-t furnaces at the im. Kirov, Stalinsk, and im. Dzerzhinskiy plants. [H] was determined by the method of vacuum heating on the LPI apparatus [Morozov, A.N., Vodorod i azot v stali (Hydrogen and Nitrogen in Steel), Metallurgizdat, 1950]. It was found that absorption of H by metal declines as V_c rises during the period of boil. However, before deoxidation, [H] does not depend upon V_c. The absence of such a relationship is explained by the fact that as the metal temperature rises at the outset of the period of pure boil, there is an increase in [H] at that moment and an increase in V_c during the period of pure boil. This

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The Influence of the Rate (cont.)

inhibits further increase in [H]. The dilution of the slag at the end of a finishing period also results in an increase in [H], but further increase in [H] will be inhibited by a higher V_C. When metal is deoxidized in a furnace, [H] rises and then declines on tapping and teeming. Therefore, all deoxidation of flake-sensitive grades of steel should be done in the ladle. High V_C is attained either through high FeO, or through an increase in temperature, etc. Therefore, V_C has a contradictory effect upon [O]. There is a direct relationship between [O] and [FeO]. A.S.

1. Metals--Processing 2. Hydrogen--Absorption 3. Carbon--Reduction
4. Vacuum furnaces--Applications

Card 2/2

ACCESSION NR: AP3003941 S/0279/63/000/003/0191/0192

AUTHOR: Terekhova, V. T.

TITLE: Conference on new trends in the study and applications of rare-earth metals (Held at Moscow, 18-20 March 1963)

SOURCE: AN SSSR. Izv. Otd. tekhnicheskikh nauk. Metallurgiya i gornoye delo, no. 3, 1963, 191-192

TOPIC TAGS: rare-earth metal, physical property, chemical property, rare-earth metal production, rare-earth metal refining, rare-earth metal alloy, alloy, rare-earth metal phase diagram, phase diagram, rare-earth metal crystal structure, crystal structure, rare-earth metal physical property, rare-earth metal chemical property

ABSTRACT: At the Soveshchaniye po "Novy*m napravleniyam v issledovanii i primenenii redkozemel'ny*kh metallov" (Conference on "New Directions in the Study and Applications of Rare-Earth Metals"), held at the Institut metallurgii im. A. A. Baykova (Institute of Metallurgy) in Moscow, 18-20 March 1963, and attended by 513 representatives of 95 organizations from 25 cities of the Soviet Union, 58 reports were presented which dealt with the physicochemical properties of

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rare-earth metals, methods of production and refining of rare-earth metals, rare-earth metals and their alloys, phase diagrams, crystal structures, and use of rare-earth metals in making steels and alloys. In his introduction, M. V. Pridantsev, chairman of the organization committee, noted the large-scale work conducted in the Soviet Union on production, study of properties, and use of rare-earth metals and their alloys. Speaking on the present status and problems in further studies of alloys of rare-earth metals, Ye. M. Savitskiy stressed the beneficial effect of rare-earth metals on the structure and physical, mechanical, and other properties of alloys of almost all metals and outlined the most important problems in the scientific research on rare-earth metals and their alloys. V. F. Terekhova reported on the main achievements in the study of physicochemical properties, development of methods of refining rare-earth metals (zone refining, distillation), single-crystal growing, and plotting phase diagrams of rare-earth metals with the elements of all groups of the periodic table. K. P. Belov, V. I. Chichernikov, and N. V. Vol'kenshteyn spoke on magnetic and electric properties of rare-earth metals and their alloys. V. L. Levshin described the use of rare-earth metals as activators of fluorescent lamps. B. V. Bondarenko spoke on the use of rare-earth metals for thermionic cathodes. Special properties of scandium, its oxidation, and its use as a getter were discussed by O. P. Naumkin. Phase diagrams of Gd rare-earth metal alloys were described by

ACCESSION NR: AP3002396

I. V. Burov, and of Y rare-earth metal alloys, by I. A. Markova. Yu. F. Yefimov spoke on the effect of rare-earth metals on the ductility of vanadium; V. A. Frolov, on the ductility of molybdenum. Reports of Ye. I. Glady*shevskiy, P. I. Kripyakevich, O. S. Zarechnyuk, V. I. Yevdokimenko, and [illegible] dealt with the crystal lattices of rare-earth metal alloys [illegible] and Yu. A. [illegible] described the properties and prospects for the application of refractory compounds. Yu. B. [illegible] and A. F. Vishkarev reported on the use of rare-earth metals for improving steel properties and on the deoxidizing properties of rare-earth metals and their effect on the nature of inclusions. Two reports by V. S. Vvedenskiy dealt with the effect of rare-earth metals on the properties of stainless and structural steel. V. F. Popov described the beneficial effect of Ce in melting Kh18N12M2T (AISI 316T) stainless steel. A. A. Presnyakov spoke on the beneficial effect of Ce on the ductility of brass, T. M. Slutskaya, on the structure and mechanical properties of welded joints, and V. P. Taraty*nov, on improvement of the physical and mechanical properties of Fe-base, Co-base, or Ni-base alloys. The conference recommended intensification of research in the field, establishment of a new monthly periodical, Redkiye metally* (Rare Metals), and calling the next conference on rare-earth metals in 1965.

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L 2098-66 EWT(m)/EWP(w)/T/EWP(t)/EWP(b)/EWA(c) IJP(c) JD/JG
ACCESSION NR: AP5021505 UR/0370/65/000/004/0176/0182
669.017.12

AUTHOR: Naumkin, O. P. (Moscow); Terekhova, V. T. (Moscow); Savitskiy, Ye. M. (Moscow)

TITLE: Phase diagram and the properties of alloys of the aluminum-scandium system

SOURCE: AN SSSR. Izvestiya. Metally, no. 4, 1965, 176-182

TOPIC TAGS: aluminum, scandium, aluminum scandium alloy, aluminum scandium system

ABSTRACT: A large series of aluminum-scandium alloys melted from 98.16- or 99.5%-pure Sc and 99.99%-pure Al has been studied. On the basis of the results obtained, a phase diagram of the Al-Sc system (see Fig. 1 of the Enclosure) was plotted. The investigations showed that Al and Sc have unlimited solubility in the liquid state. The room-temperature solubility of Sc in Al is approximately 0.5 at% and that of Al in Sc approximately 4 at%. Four compounds: $ScAl_3$, $ScAl_2$, ScAl, and Sc_2Al were identified. All the compounds are brittle and crack during solidification. The microhardness is 255, 530, 370, and 460 kg/mm for $ScAl_3$, $ScAl_2$,

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L 2098-66

ACCESSION NR: AP5021505

$ScAl_3$ and Sc_2Al, respectively. Alloying with Sc increases the tensile strength at room and elevated temperatures without a noticeable decrease in ductility (see Fig. 2 of the Enclosure). The strengthening effect of Sc is much stronger than that of rare-earth metals. Orig. art. has: 6 figures and 1 table. [WW]

ASSOCIATION: none

SUBMITTED: 29May64 ENCL: 02 SUB CODE: MM, SS

NO REF SOV: 009 OTHER: 004 ATD PRESS: 4113

Card 2/4

L 2098-66
ACCESSION NR: AP5021505

ENCLOSURE: 01

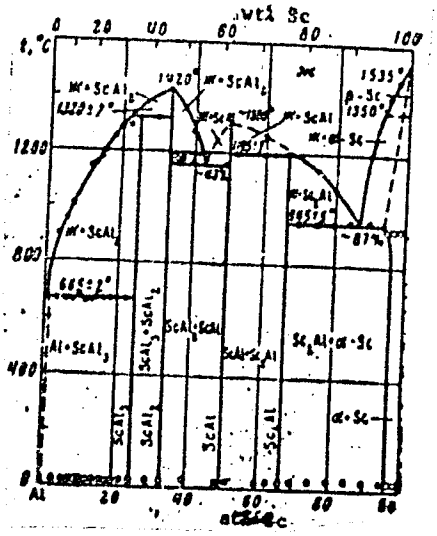

Fig. 1. Phase diagram of the Al-Sc system

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L 2093-66

ACCESSION NR: AP5021505

ENCLOSURE: 02

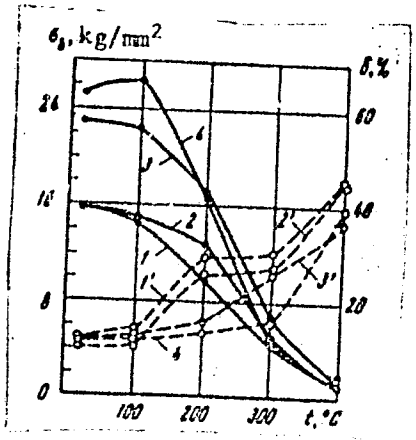

Fig. 2. Effect of Sc on tensile strength (σ_b - continuous lines) and elongation (δ - dash lines) of Al at various temperatures (1,1-pure Al; 2,2' - addition of 0.1 at% Sc; 3,3' - 0.3 at% Sc; 4,4' - 0.7 at% Sc)

Card 4/4

L 6484-66 EWT(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b) IJP(c) MJW/JD/HW/JGN(CL)

ACC NR: AP5025596 SOURCE CODE: UR/0129/65/000/010/0032/0034

AUTHOR: Terekhova, V. V.; Andreyeva, A. G. 61

ORG: none B

TITLE: Calorizing nickel-base alloys

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 10, 1965, 32-34

TOPIC TAGS: steel, alloy steel, heat resistant steel, steel calorizing, calorized steel mechanical property, steel oxidation resistance/EI867 steel, EI929 steel, ZhS6K steel

ABSTRACT: EI867, EI929, and ZhS6K heat-resistant alloys were calorized in a mixture consisting of 98% ferroaluminum master alloy and 2% ammonium chloride at 850—1110C for 2, 4, and 8 hr in order to determine the effect of the temperature and duration of exposure on the depth of the surface layer and on the structure, heat resistance, and mechanical properties of the alloys. The weight gain per unit surface, the calorized layer depth, and the rate of calorizing were found to increase with increasing temperature of calorizing. With increasing exposure time, the depth and the weight gain of the calorized layer increased at a parabolic rate. With increasing time of exposure at a constant temperature, the layer depth and weight gain increased, but the rate of calorizing decreased. The surface layer on EI867 and ZhS6K alloys calorized at 950C for 4 hr contained 37—40% Al at a depth of 15 μ. The

Card 1/2 UDC: 621.785.53:669.14.018.45

L 6484-65

ACC NR: AP5025596

calorized layer on all alloys consisted of an outer zone with a microhardness of 700—850 and an inner, thinner zone with a microhardness of 700—600, compared with 400—350 for the base metal. Annealing at 750C for 2 and 5 hr decreased the microhardness of the outer zone from 770 to 600 and 500, respectively, but had no effect on the hardness of the inner zone. Calorizing at 950C for 4 hr had no effect on the tensile, rupture, and fatigue strengths and ductility characteristics of the alloys at room and elevated temperatures, but significantly increased their oxidation resistance at 1000C. The oxidation resistance of the alloys did not depend on the temperature and duration of calorizing. This makes it possible to calorize heat-resistant nickel-base alloys at various temperatures and to combine calorizing with heat treatment. Orig. art. has: 4 figures. [MS]

SUB CODE: MM, IE/ SUBM DATE: none/ ATD PRESS: 4139

Card 2/2

TEREKHOVA, Yu.P.; MARININA, K.M.; SUKHORUKOVA, L.L.; CHERNOV, Yu.P., kand. fiz.-mat. nauk, otv. red.

[Programming methods for the "Minsk-1" commuter] Metodika programmirovaniia na mashine "Minsk-1". Frunze, Ilim, 1965. 113 p. (MIRA 18:12)

ZAMKOVOY, V.; TEREKHOVA, Z.F.

"Physical geography." I.I. Zaslavskii, T.P. Gerasimova. Reviewed by V. Zamkovoi, Z.F. Terekhova. Geog.v shkole 19 no.1:75-77 Ja-F '56. (MLRA 9:5)
(Physical geography) (Zaslavskii, I.I.) (Gerasimova, T.R.)

SLUTSKIY, S.S., kand.ekonom.nauk; PILIPCHUK, A.I., nauchnyy sotrudnik; ANTONOV, M.F., kand.tekhn.nauk; MALYARCHUK, G.S., kand.tekhn. nauk. Prinimali uchastiye: MEL'NIKOV, A.A., inzh.; ARSEN'YEVA, A.I., inzh.; TEREKHOVA, Z.S., tekhnik; SIDOROVA, L.N., tekhnik; ISSERLIS, I.I., tekhnik; KRAVCHENKO, A.I., inzh. POSTNIKOV, S.A., inzh., red.; ZHULIN, V.K., otv. za vypusk; POKHLEBKINA, M.I., tekhn.red.

[Efficient distribution of and organization of work at cargo transfer points] Ratsional'noe razmeshchenie i organizatsiia raboty punktov perevalki. Pod obshchei red. S.S.Slutskogo. Moskva, 1960. 127 p. (MIRA 14:2)

1. Moscow. TSentral'nyy nauchno-issledovatel'skiy institut ekonomiki i ekspluatatsii vodnogo transporta. 2. TSentral'nyy nauchno-issledovatel'skiy institut ekonomiki i ekspluatatsii vodnogo transporta (for Slutskiy, Pilipchuk, Terekhova, Sidorova, Isserlis). 3. Institut kompleksnykh transportnykh problem AN SSSR (for Antonov, Malyarchuk, Kravchenko).

(Cargo handling)

TEREKHOVA-UVAROVA, N.A.

Autoantigenic properties of the heart muscle in experimental myocardial infarction in dogs. Pat. fiziol. i eksp. terap. 8 no.5:20-24 S-O '64. (MIRA 18:12)

1. Kafedra patologicheskoy fiziologii (zav. - prof. I.V.Kolpakov [deceased]) Kuybyshevskogo meditsinskogo instituta. Submitted April 12, 1963.

TEREKHOVICH, S.L.

24(7) SOV/48-23-9-4/57

AUTHORS: Kalinin, S. K., Marzuvanov, V. L., Fayn, E. Ye., Zavyalina, G. N., Parevertun, V. N., Terekhovich, S. L.

TITLE: Atlas of Spectral Lines for a Spectrograph With Diffraction Grating

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 9, pp 1061-1063 (USSR)

ABSTRACT: In connection with the series production of diffraction grat-
ing spectrographs, the necessity of methodical directives
and of atlases is pointed out. At present, the authors are
preparing an atlas of spectral lines for grating spectrographs.
The atlas consists of plane tables (planshet) and of their
descriptions. In figure 1, for example, the iron spectrum in
a range extending over 66 Å is shown. This spectrum was record-
ed by means of the DFS-3 spectrograph, the grating of which
has 300 grating lines per mm. The spectra recorded were en-
larged 20 times and the lengths of the plane tables amount
to 370 mm, so that, for example, the entire iron spectrum has
a total length of 25 m. Owing to the high dispersion of the
instrument about 7000 lines of 65 elements are recorded, and
the intensity of the lines is estimated according to a 12-degree

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scale; if the sample contains more than 10% of the element,
the lines are marked by the figure 1, and if it contains less
than 0.0001%, by the figure 12. In the description the proper-
ties of the lines are discussed, and directives are given
for carrying out analyses. There are 1 figure and 3 Soviet
references.

ASSOCIATION: Institut yadernoy fiziki Akademii nauk KazSSR (Institute of Nuclear Physics of the Academy of Sciences of the Kazakhskaya SSR)

Card 2/2

TEREKHOVSKIY, B., inzh.

Methods of testing clays need to be perfected. Stroi.mat. 3 no.7:29 Jl '57. (MIRA 10:10)
(Clay--Testing)

PIVEN', I.Ya.; MIKHALKOVICH, S.I.; TEREKHOVSKIY, B.I.; CHERNYAK, Ya.N., kand. tekhn. nauk

Research on methods for making expanded clay fillers. Stroi. mat. 5 no.4:29-34 Ap '59. (MIRA 12:6)

1.Nachal'nik keramicheskogo tsekha Minskogo eksperimental'nogo zavoda (for Terekhovskiy). (Clay)

BUREYKO, V.S., kand.tekhn.nauk; TEREKHOVSKIY, B.I., inzh.

Warming up the clay batch by introducing heated aggregates.
Stroi. mat. 7 no. 1:32 Ja '61. (MIRA 14:1)
(Brickmaking)

TEREKHOVSKIY, B.I.

Using sand with carbonaceous impurities in the production of ceramics. Stek. i ker. 18 no. 3:23-25 Mr '61. (MIRA 14:5)
(Rocks, Carbonate) (Ceramic industries)

SEN', Z.P., kand.tekhn.nauk; TEREKHOVSKIY, B.I. [Terekhovs'kyi, B.I.], inzh.; YARMAK, O.F., inzh.

Some data on the effect of water vapor on the porcelain body in firing. Leh.prom. no.1:79-83 Ja-Mr '62. (MIRA 15:9)

1. Ukrainskiy nauchno-issledovatel'skiy institut steklyannoy i farforo-fayansovoy promyshlennosti.
(Ukraine--Pottery)

TEREKHOVSKIY, B.I. [Terekhovs'kii, B.I.]; SKRYABINSKAYA, I.V. [Skriabyns'ka, I.V.]; PAVLIKOV, V.M. [Pavlykov, V.M.]; MALINKA, M.K. (Malynka, M.K.]

Increasing the whiteness of a porcelain body by treatment with water vapors during firing. Leh.prom. no.4:62-64 O-D '62. (MIRA 16:5)

1. Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR.
(Porcelain)

TEREKOV, Ye.

With their own hands. Mast.ugl.6 no.3:14 Mr '57. (MLRA 10:4)

1. Sotrudnik shakhtnoy gazety "Za tsiklichnost'".
(Donets Basin--Dwellings)

AL'TER, Samuil Zavel'yevich; TEREKOV, Ye., red.; TIHOSHEVSKAYA, A., tekhn. red.

[Donets Basin; tourist's guide] Donbass; sputnik turista. Stalino, Knizhnoe izd-vo Stalino-Donbass, 1960. 250 p. (MIRA 14:5)

(Donets Basin--Guidebooks)

TEREKOVA, YE. N.

Lutsenko, I. M. and Terekova, Ye. N. "Rationalization of Methods for Measuring Discharges of Suspended Sediments", Sotsialisticheskaya nauka i tekhnika (Socialist Science and Engineering) No 4, 1937

SO: U-3039, 11 Mar 1953

TERELADZE, A.K.

Physicogeographical features of eastern Chaneti (Lazistan). Trudy Tbil.GU 72:155-174 '59. (MIRA 15:5)
(Rize Province, Turkey—Physical geography)

TERELADZE, A.K.

Division of the Chorokh(Coruh) basin into physicogeographical sections (landforms). Uch.zap.AGU.Ser.geol.-geog.nauk no.5:43-49 '61. (MIRA 16:9)

TERELADZE, A.

Physicogeographical characteristics of the Kola-Artaan (Gele-Ardahan) vulcanic upland. Trudy Tbil. GU 90:107-119 '63. (MIRA 17:4)

SIUTA, Jan; TERELAK, Henryk

Observations on the formation of modern thufurs in the Vistula Valley. Przegl geogr 35 no.2:215-219 '63.

TEREMENKO, A.D. (Novosibirsk).

Observations made from an airplane of the solar eclipse of February 25, 1952. Biul.VAGO no.14:37-38 '53. (MLRA 6:11)

(Eclipses, Solar--1952)

KOROL', A.G.; TEREMENKO, L.A.

Spontaneous brucellosis in rodents. Trudy Inst. zool. AN Kazakh. SSR 22:216 '64. (MIRA 17:12)

BESSALOV, V.S.; PANASOVSKIY, V.A.; KOROL', A.G.; TEREMENKO, L.A.; BONDARENKO, L.F.; TIMOFEYEV, M.A., SHIRYAYEV, D.T.

Outbreak of tularemia on Biryuchiy Island. Zhur.mikrobiol.,epid. i immun. 42 no.5:54-57 My '64. (MIRA 18:2)

1. Khersonskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya i Rostovskiy protivochumnyy institut.

COUNTRY : USSR

R

[illegible] Diseases Caused by [illegible]

ABS. JOUR. : Khimiol., No. 13, 1958, No. 59739

AUTHOR : Yeremeyev, V. A.; Fotova, M. V.

INST. : -

TITLE : Diplococcus Infection in Silvery-Black Foxes

PUB. PUB. : Narsko-lovodstvo i sverovodstvo, 1957, No 3, 56

ABSTRACT : The outbreak of sickness in a wild animal breeding farm is described. In order to combat the diplococcus infection, the vaccination of males and females with diplococcal Chepurov formol vaccine was resorted to.

Card: 1/1

1. GORBACHEVA, N.A.; KONSTANTINOVA-SHLEZINGER, M.A.; TERSHENTSKAYA, YE.G.; TRAPEZNIKOVA, Z.A.

2. USSR (600)

4. Phosphors

7. Centers of luminescence and factors influencing processes of obtaining crystallophosphors. Izv.AN SSSR. Ser.fiz. 15 no.6, 1951.

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

TEREMETSKAYA, A. G. Cand. Geolog-Mineralog Sci.

Dissertation: "Mineralogy of the Mukalan Tin-Sulfide Deposits of the Skarn Type." All-Union Sci. Res. Inst. of Mineral Raw Materials. 29 Jan 47.

SO: Vechernyaya Moskva, Jan, 1947. (Project #17836)

VASIL'KOVA, N.N.; TEREMETSKAYA, A.G.; SHATSKAYA, V.T.

Tin deposits associated with subvolcanic bodies. Sov.geol. 2 no.10:81-97 O '59. (MIRA 13:4)

1. Vsesoyuznyy institut mineral'nogo syr'ya (VIMS).
(Sikhote-Alin' Range--Tin ores)

SPIVAK, G.V.; KROKHINA, A.I.; TEREMETSKAYA, A.G.; TERNOVSKAYA, M.V.

Studying the microstructure of ore minerals by ion bombardment.
Zap.Vses.min.ob-va 90 no.6:695-697 '61. (MIRA 15:2)

1. Fizicheskiy fakul'tet Moskovskogo gosudarstvennogo universiteta.
(Mineralogy)

TEREMETSKAYA, A.G.; BOCHAROVA, G.I.; VOLCHENKOVA, V.A.

Anisotropy of some physical properties of calcite. Vest.Mosk.un. Ser.4: Geol. 17 no.5:44-49 S-O '62. (MIRA 15:11)

1. Kafedra mineralogii Moskovskogo universiteta.
(Anisotropy) (Calcite)

TEREMETSKAYA, A.G.; KHARCHENKO, L.Yu.

Some characteristics of the change in the composition of alkali pegmatites depending on the composition of enclosing rocks. Vest.-Mosk.un.Ser. 4:Geol. 18 no.2:50-57 Mr-Ap '63. (MIRA 16:5)

1. Kafedra mineralogii Moskovskogo universiteta.
(Pegmatites--Analysis)

DUVANKOV, Georgiy Semenovich; CHERNYAK, Ya.N., kandidat tekhnicheskikh nauk, redaktor; GIMPEL'SON, A.Z., redaktor; TEREMETSKIY, K.M., inzhener, retsenzent; KOTLYAROV, Ye.L., inzhener, retsenzent; GLADKIKH, N.N., tekhnicheskiy redaktor

[Safety measures and factory sanitation in building material plants] Tekhnika bezopasnosti i proizvodstvennaia sanitariia na zavodakh stroitel'nykh materialov. Pod red. IA.N. Cherniaka. Moskva, Gos. izd-vo lit-ry po stroit. materialam, 1956. 133 p. (MIRA 10:4)
(Building materials industry) (Factory sanitation)
(Factories—Safety appliances)

TEREMETSKIY, Konstantin Nikolayevich; KHOKHLOV, V.K., inzh., nauchn. red.

[Designing cement and asbestos cement plants] Proektirovanie tsementnykh i asbestotsementnykh zavodov. Moskva, Stroiizdat, 1964. 149 p. (MIRA 18:1)

TEREMETSKIY, L.G. (Moskva A-315, Leningradskiy prosp. d. 78, korp. 4, kv. 10.)

Possibility of functional reconstruction of heterotopic bone tissue. Ortop., travm. i protez. 26 no.7:66-68 Jl '65. (MIRA 18:7)

1. Iz khirurgicheskoy kliniki (zav. - prof. B.S.Rozanov) klinicheskoy ordena Lenina bol'nitsy imeni S.P. Botkina i eksperimental'noy laboratorii (zav. - kandidat meditsinskikh nauk V.S.Dashkovskaya) Moskovskogo instituta skoroy pomoshchi imeni Sklifosovskogo.

TEREMETSKIY, P.G.

G.K.Andriasian's method of treating onychomycosis in ambulant patients. Vest.ven.i derm. no.6:16-17 N-D '53. (MLRA 6:12)
(Nails (Anatomy)--Diseases)

TER-EMMANUIL'YAN, N.Ya.

Study of the functioning of wooden elements with weak points under static and protracted flexure. Izv.vys.ucheb.zav.; stroi. i arkhit. 4 no.6:19-32 '61. (MIRA 15:2)

1. Stalingradskiy institut inzhenerov gorodskogo khozyaystva.
(Wood--Testing)
(Beams and girders--Testing)

TEREMOV, I.

The peacework bonus system of remuneration in the construction industry. Sots.trud. no.4:134-135 Ap '58. (MIRA 11:4)

1. Starshiy inzhener otdela trudai zarplaty tresta Luganskshakhtostroymontazh.
(Construction industry--Accounting) (Wages)

TEREMOV, V.I.

The Third International Radio Engineering Exhibition. Av.prom. 26 no.8:106-109 Ag '57. (MIRA 15:4)
(Radio--Apparatus and supplies)
(Ljubljana (Yugoslavia)--Exhibitions)

TEREMYAZEV, G., inzh.; GLEBOV, V., inzh.; LUZANOV, B.; MEDNIKOV, V.; GURMAN, V., inzh.; SHARKHOV, A., inzh.; KOZLOV, N.; KULIK, B.; PETROV, N., inzh.; POTOKIN, A., master po pnevmopriboram

Exchange of experience. Avt. transp. 43 no.9:49-53 S '65. (MIRA 18:9)

1. Tashkentskiy avtobusnyy park No.2 (for Potokin).

TOLDY, M., CSc.; TEREN, L.; HUDCOVIC, A., doc.

Experience with the use of oxytocin in labor function disorders. Cesk. gyn. 27 [41] no.6/7:487-493 Ag '62.

1. Katedra starostlivosti o matku Lek. fak. Univerzity Komenskeho v Bratislave, veduci katedry doc. dr. A. Hudcovic.
(LABOR) (OXYTOCIN)

TOLDY, M.; POCIATEK, A.; TEREN, L.; HUDCOVIC, A.; Technicka spolupraca: [redacted]IOKA, B.

The prognostic value of a history of fetal death during previous pregnancies. Cesk.gynek. 28 no.8:577-581 O '63.

1. II. gyn.-por. klin. Lek. fak. UK v Bratislave, prednosta doc. dr. A. Hudcovic.

BARDOS, A.; MASAR, I.; TEREN, L.; SOCHOR, J.

Does an influenza epidemic increase the incidence of intrauterine fetal death? Cesk.gynek. 28 no.8:545-547 O '63.

1. I. gyn.-por. klin. Lek. fak. UK v Bratislave (prednosta prof. dr. S. Stefanik); Zdravot. komisia SNR v Bratislave.; II. gyn.-por. klin. Lek. fak. UK v Bratislave (prednosta doc. dr. A. Hudcovic); Gyn.-por. odd. OUNZ Bratislava-okolie (veduci MUDr. J. Sochor).

HUDCOVIC, A.; TOLDY, M.; TEREN, L.; POCIATEK, A.

Delivery of the fetus dying during pregnancy. Cesk.gynek. 28 no.8: 572-576 O '63.

1. II. gyn. por. klin. Lek. fak. UK v Bratislave, prednosta doc. dr. A. Hudcovic.

Terei L

TOLDY, M.; TEREI, L.; STEFANIK, P.

Dept. for care of mothers, II. medical faculty, Comenius University (katedra starostlivosti o matku, II. lek. fak. Univ. Komenskeho), Bratislava, director: docent A. Hudsovic, MD CSSR

Bratislava, Bratislavske Lekarske Listy, No 5, 1963, pp 269-276 K3-

"On the Importance of Following Blood Losses in the Course of Gynaecological Operations"

(3)

TOLDY, M.; TERENI, L.

Delivery of large fetuses. Bratisl. lek. listy 44 no.3:142-151 '64.

1. Katedra starostlivosti o matku II. lek.fak. Univ. Komenskeho v Bratislave; veduci: doc. MUDr.A.Hudcovic.

*

TOLDY,M. (Bratislava, Sulekova 16); TEREN,L.; HUDCOVIC,A.,doc. dr.

The use of oxytocin during the 1st and 2d stages of labor.
Cesk. gynek. 30 no.1:64-69 Mr'65.

1. II. gyn.-por. klinika Lekarske fakulty University Komenskeho v Bratislave (prednosta: doc. dr. A. Hudcovic).

TEREN, S.

GEOGRAPHY & GEOLOGY

Periodicals: KRASY SLOVENSKA Vol. 36, No. 2, Feb. 1959

TEREN, S. A visitor. p. 64.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 5, May 1959, Unclass.

TERENATSKAYA, M. K., SKRYPNIK, S. I. and PAVLOVICH, N. V. (Kiev technological Institute of light Industry)

"Investigations of dynamics of cooling of synthetic fiber in process of its production"

Report presented at the Section on Heat and Mass Transfer, Scientific Session, Council of Acad. Sci. Ukr SSR on High Temperature Physics, Kiev, 2-4 Apr 1963.

Reported in Teplofizika Vysokikh temperatur, No. 2, Sep-Oct 1963, p. 321, JPRS 24,651. 19 May 1964.

TERENBAUM, M.M., kandidat tekhnicheskikh nauk; NEKHOROSHEV, V.M., inzhener.

One of the reasons for mining machinery breakdown. Ugol' 31 no.1: 19-22 Ja. '56. (MLRA 9:4)

(Coal mining machinery)

TERENBAUM, M.M., kandidat tekhnicheskikh nauk.

Laboratory evaluation of the wear resistance of steel subjected to sandpaper tests. Vest. mash. 36 no.8:25-30 '56. (MLRA 9:10)

1. Vsesoyuznyy proyektno-tekhnologicheskiy i eksperimental'nyy institut ugol'nogo mashinostroyeniya.
(Steel--Testing) (Mechanical wear)

TERENETSKAYA, M. K.

"Individual Air Conditioning in Medical and Residential Buildings." Acad of Architecture Ukrainian SSR, Inst of Postgraduate Studies and Inst of Construction Techniques, Kiev, 1955. (Dissertation for the Degree of Candidate in Technical Sciences)

SO: M-955, 16 Feb 56

TERENETSKIY, K. S.

TERENETSKIY, K. S. -- "Transportation Standards in the Construction of Automobile Roads." Sub 19 Jun 52, Moscow Highway Inst imeni V. M. Molotov (Dissertation for the Degree of Doctor in Technical Sciences)

SO: Vechernaya Moskva, January-December 1952

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 1, p 166 (USSR) 15-57-1-1040

AUTHOR: Terenetskiy, K. S.

TITLE: Determination of the Filtration Coefficient in Clean Sands by the Method of the Ukrainian Highway Scientific Research Institute (Opredeleniye koeffitsiyenta fil'tratsii chistykh peskov metodom UkrdorNII)

PERIODICAL: Sb. tr. Ukr. dor-transp. n.-i. in-ta, 1955, Nr 1, pp 3-18

ABSTRACT: The author considers the method and the apparatus for determining the filtration coefficient for a number of sands according to the technique developed in the laboratories of the Ukrainian Highway Scientific Research Institute in 1949 by P. N. Kovalev. The method consists basically of standardizing a preparation of the sample and compacting it to its greatest density,

Card 1/2

Determination of the Filtration Coefficient in Clean Sands (Cont.) 15-57-1-1040

corresponding to the density under natural conditions in highway surfacing. The proposed apparatus is called a filtration meter. It permits the determination of the filtration coefficient in sands both with disturbed and with undisturbed structures. Information is given on the construction and the calculations of the apparatus, on the technique of using it, and on the results of studies on samples with disturbed and undisturbed structures. The author concludes by commenting on the considerable advantages in the proposed method and apparatus as compared with the generally used method of Geynikh according to the All-Union State Standard 3587-47, namely: 1) the short time for testing (10 to 15 minutes); 2) the possibility of measuring the filtration coefficient in sands with disturbed and undisturbed structures directly in the field; 3) the simplicity in handling and preparation: 4) the small size and light weight.

Card 2/2

P. I. F.

TERENETSKIY, K.S., professor.

Simplified calculation of the strength of non-rigid pavements subjected to bending. Avt.dor.18 no.5:16-17 S'55. (MLRA 9:1)
(Pavements)

TERENETSKIY, K.S., professor, doktor tekhnicheskikh nauk.

Achievements and shortcomings in the current theory of strength of nonrigid pavements. Avt. dor. 19 no.6:18-19 Je '56. (MLRA 9:9)

(Pavements)

TERENETSKIY, K.S., doktor tekhn. nauk, prof.

Using dynamic and economic characteristics of the ZIL-150 automobiles for calculating the cost of transportation on highways. Trudy Kiev. avt.-dor. inst. no.33-23 '57. (MIRA 11:5)
(Transportation, Automotive--Cost of operation)

BABKOV, V.F., BELEN'KIY, I.I., BIRULYA, A.K., prof. doktor tekhn. nauk,; BIRULYA, V.I., DADENKOV, Yu. N., ZAMAKHAYEV, M.S., KAZANSKIY, K.A., KROPROD, L.L., KUDRYAVTSEV, A.S., TERENETSKIY, K.S., MAL'KOVA, N.V., tekhn. red.

[Handbook for road construction engineers; planning highways] Spravochnik inzhenera-dorozhnika; proektirovanie avtomobil'nykh dorog. Moskva, Nauchno-tekhn. izd-vo avtotransp. lit-ry, 1958. 438 p. (MIRA 11:10)

(Roads)

TERKNETSKIY, K.S., prof.; BONDARENKO, A.I., kand. tekhn. nauk.

Experience in using soft limestone for road constructio in southern provinces of the Ukraine. Avt.dor. 21 no.3:4-6 Mr '58. (Ukraine--Road construction) (Limestone) (MIRA 11:3)

TERENETSKIY, K.S., prof.

Calculating potential traffic in road building. Avt.dor. 22 no.8:5-6 Ag '59. (MIRA 12:11)
(Road construction)

TERENETSKIY, K.S., doktor tekhn.nauk

Calculating transportation costs in surveying roads for the Ukrainian S.S.R. Avt.dor.i dor.stroi. no.1:219-225 '65.
(MIRA 18:11)

ARKHANGEL'SKIY, A.S., kand.tekhn.nauk; TERENETSKIY, L.N., mladshiy nauchnyy sotrudnik

In the right direction ("Problems of mine haulage; collection of articles." Reviewed by A.S.Arkhangel'skii, L.N.Terenetskii). Ugol' Ukr. 3 no.1:43-45 Ja '59. (MIRA 12:1)
(Mine haulage)

ARKHANGEL'SKIY, A.S., kand. tekhn. nauk; VASIL'YEV, N.V., kand. tekhn. nauk; GORDIYENKO, B.I., inzh.; SAMOYLOV, V.P., kand. tekhn.nauk; TERENETSKIY, L.N., inzh. Prinimali uchastiye: DEMESHKO, Ye.A., inzh.; KUBENEV, Kh.K., kand. tekhn. nauk; SMORODINOV, M.I., kand. tekhn. nauk; KHRAPOV, V.G., kand. tekhn. nauk; NIKOL'SKIY, I.S., inzh.; KATKOV, G.A., inzh.; VORONTSOVA, N.D., starshiy laborant; BLAGOSLAVOV, Yu.B., kand. tekhn. nauk, nauchnyy red.; SMIRNOVA, A.P., red. izd-va; IGNAT'YEV, V.A., tekhn. red.

[Underground mining in loose rocks] Prokhodka podzemnykh vyrabotok v sypuchikh porodakh. Pod obshchei red. A.S.Arkhagel'skogo. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 205 p. (MIRA 14:11)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut osnovaniy i podzemnykh sooruzheniy. 2. Sotrudniki Laboratorii metodov vozvedeniya podzemnykh sooruzheniy Nauchno-issledovatel'skogo instituta osnovaniy Akademii stroitel'stva i arkhitektury SSSR (for all except Blagoslavov, Smirnova, Ignat'yev).
(Mining engineering)

TERENETSKIY, L.N.

Experimental studies of pressing pipes through soil by means of vibration. [Trudy] NII osn. no.51:31-37 '62. (MIRA 16:2)
(Pipe-laying machinery)
(Vibrators)

TEREMETSKOY, M. K., SHIMKO, I. G., FISHMAN, Ts. E., TRETYAKOV, V. I., VASHCHENKO, D. M. and PAVLOVICH, N. V.

"Thermal physical conditions of extraction of low-molecular combinations of meets of polymer."

Report presented at the Section on Thermal-physical Properties and Non-stationary Thermal Capacity, Scientific Session, Council of Acad. Sci. Ukr SSR on High Temperature Physics, Kiev, 2-4 Apr 1963.

Reported in Teplofizika Vysokikh temperatur, No. 2, Sep-Oct 1963, p. 321, JPRS 24,651. 19 May 1964.

BUGAYEV, Aleksey Alekseyevich, tokar'; IZVEKOV, Arkadiy Ivanovich, master elektrikov; TRET'YAKOV, Eduard Aleksandrovich, inzh.-tekhnolog; ORZHEKHOVSKIY, Pavel Iosifovich, slesar'; LITUS, Il'ya Sil'vestrovich; BABANOV, Nikolay Fedorovich, starshiy master; SYRODOYEV, Aleksandr Konstantinovich, mekhanik; TERENIK, Mikhail Semenovich; LADYGIN, Aleksandr Iosifovich

From the rostrum of a plant meeting. Izobr.i rats. no.12:24-28 D '58. (MIRA 11:12)

1. Novo-Kramatorskiy mashinostroitel'nyy zavod (for all). 2. Mekhanicheskiy tsekh No.5 (for Bugayev). 3. Mekhanicheskiy tsekh No. 7, predsedatel' tsekhovogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov (for Izvekov). 4. Upolnomochennyy Byuro ratsionalizatorov i izobretateley v 1-m mekhanicheskom tsekhe (for Tret'yakov). 5. Mekhanicheskiy tsekh No.7 (for Orzhekhovskiy). 6. Rukovoditel' sektsii sodeystviya izobretatel'stvu i ratsionalizatsii Soveta veteranov truda (for Litus). 7. Fasonnoliteynyy tsekh No.1 (for Babanov, Syroyedov). 8. Nachal'nik otdela tekhnicheskoy informatsii i izobretatel'stva (for Terenik). 9. Predsedatel' zavodskogo soveta Vsesoyuznogo obshchestva izobretateley i ratsionalizatorov (for Ladygin).
(Kramatorsk--Machinery industry)

TERENIN, A. G.

USSR/Agriculture - Virgin soils

Card 1/1 ; Pub. 77 - 4/22

Authors ; Terenin, A. G.

Title ; Virgin soil of non-black earth region

Periodical ; Nauka i Zhizn' 8, 8-10, Aug 1954

Abstract ; Order of the KPSS (Communist Party of the Soviet Union) to the Soviet people to clear, plow and sow 13 million hectares of virgin soil in Siberia, Kazakhstan, Ural, Northern Caucasus and some Volga river regions, in 1954-1955. Experimental work of this type in the Leningrad region showed very good results. Illustrations.

Institution : .....

Submitted : .....

L 26087-66 EWT(1) SCTB DD

ACC NR: AP6015085 SOURCE CODE: UR/0020/66/168/001/0068/0071

AUTHOR: Kobyshev, G. I.; Lyalin, G. N.; Terenin, A. N. (Academician)

ORG: Leningrad State University im. A. A. Zhdanov (Leningradskiy gosudarstvennyy universitet)

TITLE: Luminescence of chlorophyll excited by a ruby laser

SOURCE: AN SSSR. Doklady, v. 168, no. 1, 1966, 68-71

TOPIC TAGS: luminescence, luminescence spectrum, luminescent material, laser application, laser effect, chlorophyll

ABSTRACT: Experiments were performed to detect radiation emission during transition of a molecule from the second excited singlet level to the ground level ($S_2^* \longrightarrow S_0$). A high-power ruby laser (J. L. Hall et al., Phys. Rev. Lett., 11, 364 (1963); W. L. Peticolas, et al., Phys. Rev. Lett., 10, 43, (1963); J. B. Birks et al., Phys. Lett., 18, 127 (1965) was used to excite solution of chlorophyll "a" (5×10^{-3} M), methyl-chlorophyllide (5×10^{-3} M), magnesium phthalocyanine (10^{-4} M) in ethyl alcohol, chlorophylline (5×10^{-3} M) in methyl alcohol, and phthalocyanine without metal (10^{-4} M) in dioxane. The emission from a "Razdan" K-4-2 laser (pulse energy of 1 joule, with a pulse repetition frequency of 2 cps) was focused on the object by a lens through a KS-17 light filter. The luminescence of the object was separated by means of a ZMR-3 monochromator (linear dispersion in the investigated range was

Card 1/2 UDC: 535.373.2

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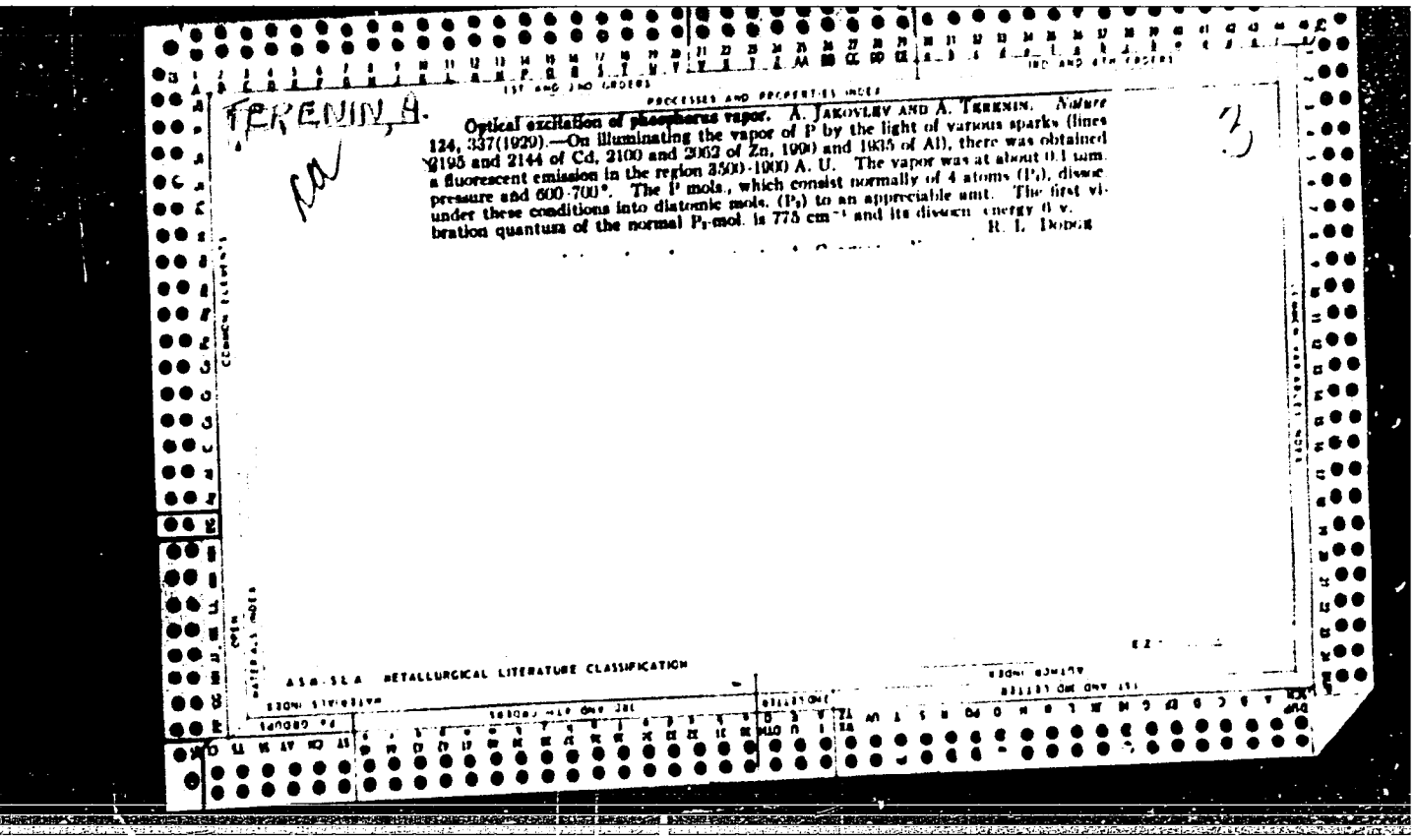
ACC NR: AP6015085

20 mμ/mm). The photon counting method was used for recording the luminescence spectrum. A blue-green luminescence in the path of the laser beam was clearly seen in the solutions of chlorophyll "a" and methylchlorophyllide. The spectrum of this luminescence at 290K displayed a 430—510 mμ band with a maximum at 480 mμ displaced to the longwave side with respect to the 430 mμ band of the absorption spectrum. The observed band can be attributed to the expected radiative transition from the S_2^* level to the S_o ground level. Three processes are suggested as possible causes for the excitation of the molecule to a high S_2^* level during absorption of small-energy photons: 1) addition of two photons of a powerful pulse owing to an intermediate virtual level; 2) two-photon excitation resulting from the first excited singlet state during its existence (2×10^{-9} sec); and 3) accumulation, caused by a powerful pulse, of a high concentration of triplet molecules with subsequent triplet-triplet annihilation. Orig. art. has: 2 figures. [JA]

SUB CODE: 20/ SUBM DATE: 15Feb66/ ORIG REF: 006/ OTH REF: 026/ ATD PRESS: 4254

Card 2/2 CC



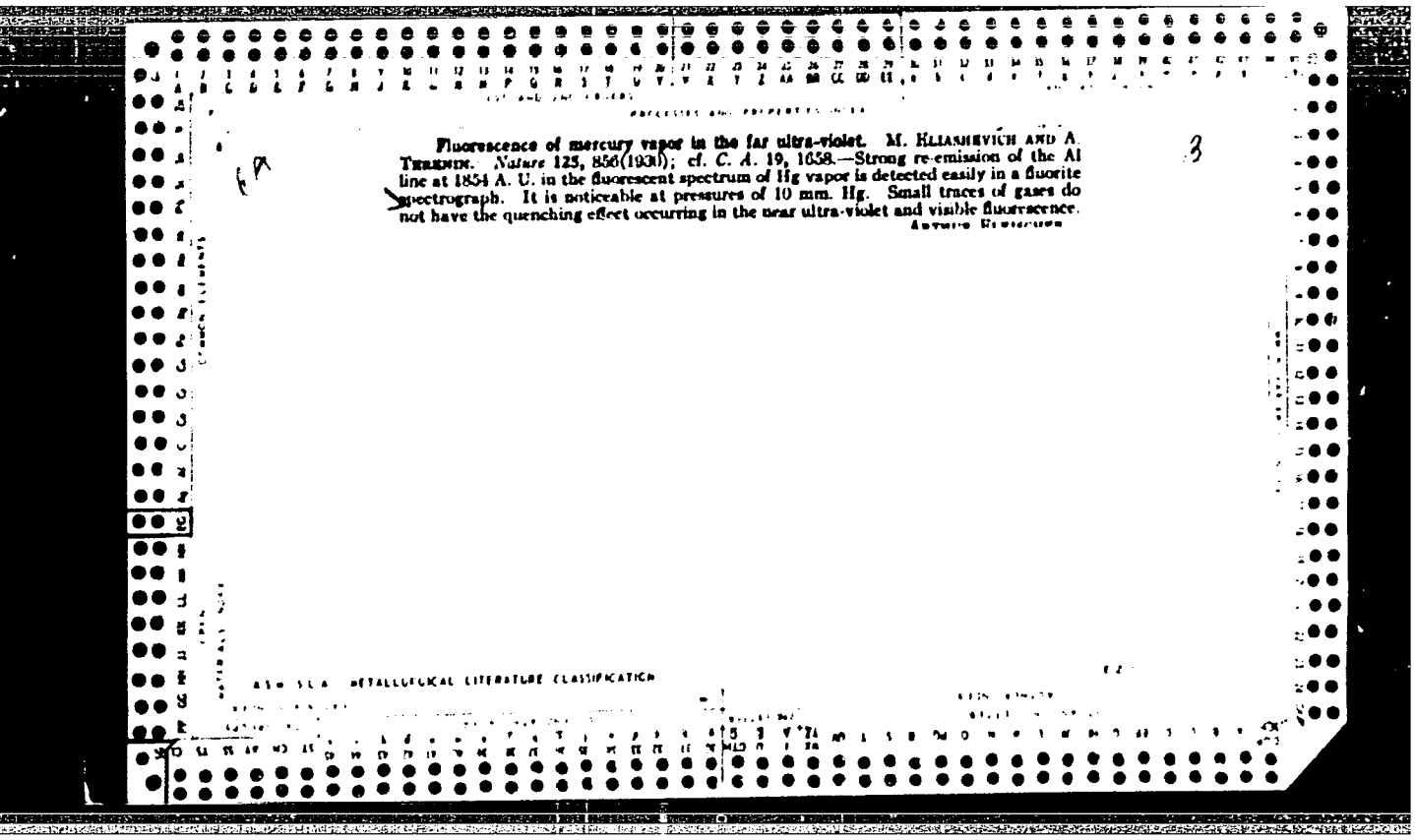
TERENIN, A.

PROCESSES AND PROPERTIES INDEX

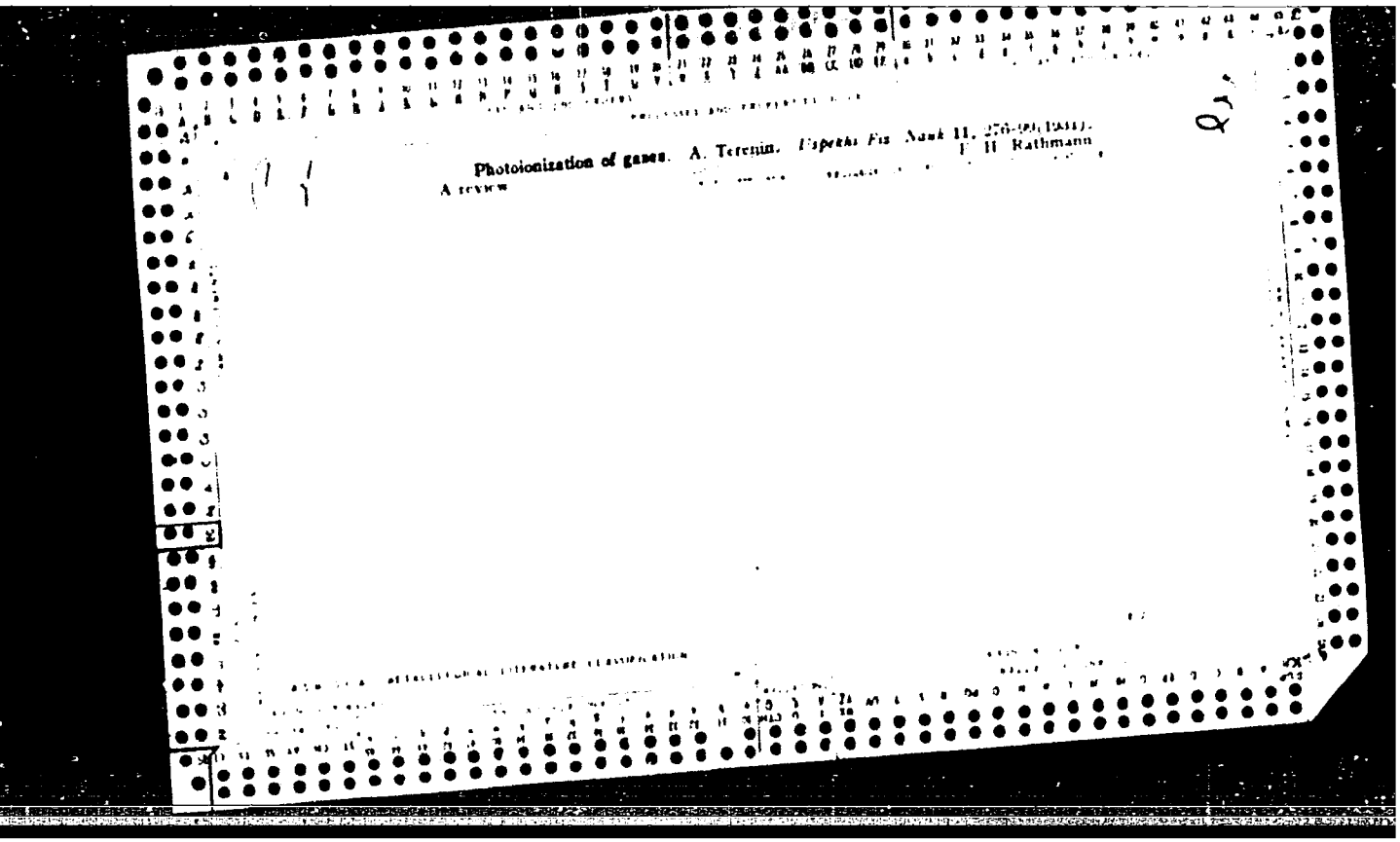
Optical excitation of phosphorus vapor. A. JAKOVLEV AND A. TERENIN. *Nature* 124, 337(1929).—On illuminating the vapor of P by the light of various sparks (lines 2195 and 2144 of Cd, 2100 and 2062 of Zn, 1990 and 1935 of Al), there was obtained a fluorescent emission in the region 3500-1900 A. U. The vapor was at about 0.1 mm. pressure and 600-700°. The P mols., which consist normally of 4 atoms (P_4), dissociate under these conditions into diatomic mols. (P_2) to an appreciable amt. The first vibration quantum of the normal P_2-mol. is 775 cm^{-1} and its dissociation energy 6 v.

R. L. DODGE

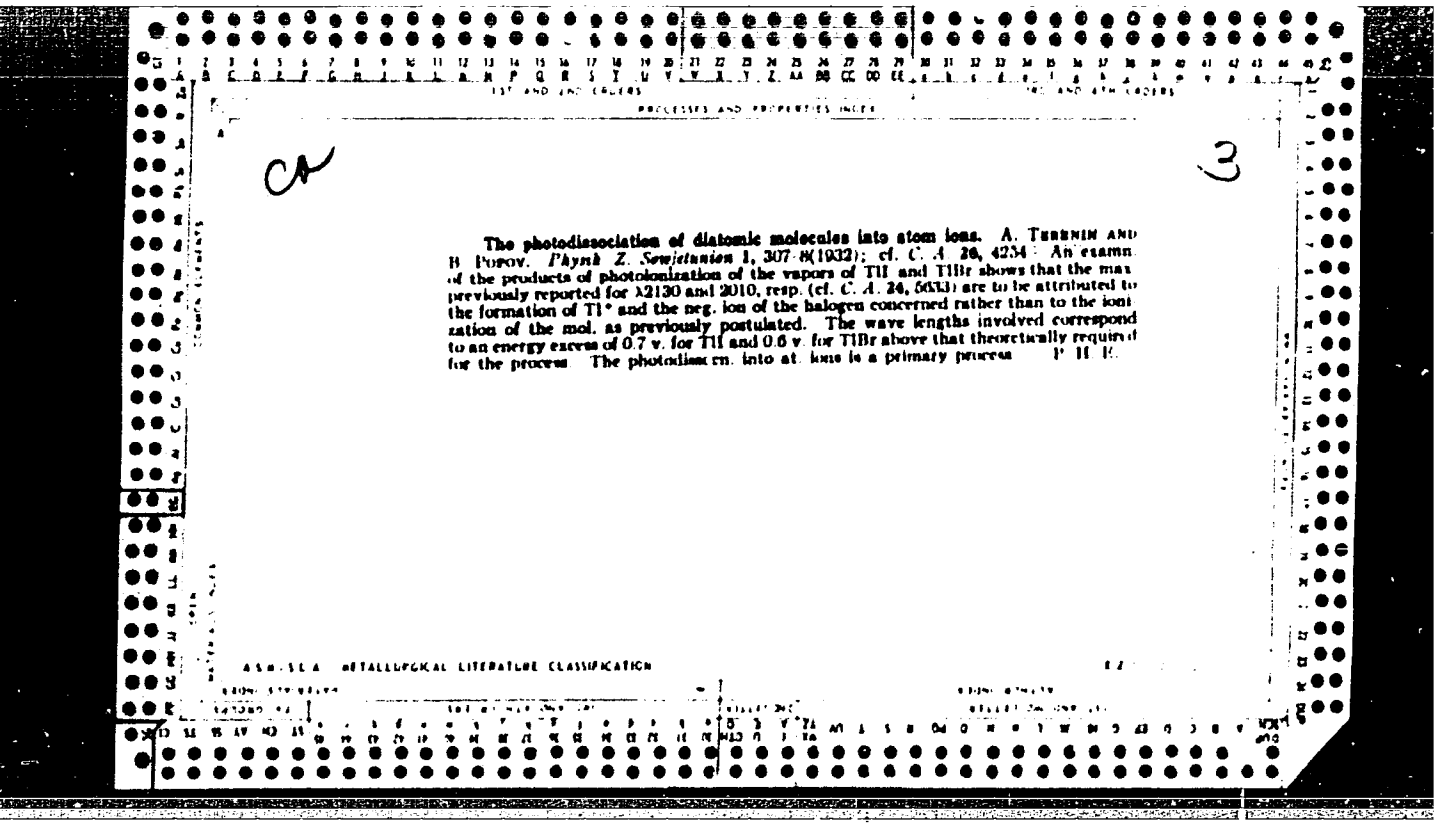
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Fluorescence of mercury vapor in the far ultra-violet. M. Kliashevich and A. Terenin. *Nature* 125, 856(1930); cf. *C. A.* 19, 1658.—Strong re-emission of the Al line at 1854 A. U. in the fluorescent spectrum of Hg vapor is detected easily in a fluorite spectrograph. It is noticeable at pressures of 10 mm. Hg. Small traces of gases do not have the quenching effect occurring in the near ultra-violet and visible fluorescence.



Photoionization of gases. A. Terenin. *Uspekhi Fiz. Nauk* 11, [illegible]. F. H. Rathmann.
A review



The photodissociation of diatomic molecules into atom ions. A. Terrenin and B. Popov. *Physik. Z. Sowjetunion* 1, 307–8(1932); cf. *C. A.* **26**, 4254. An examn. of the products of photoionization of the vapors of TlI and TlBr shows that the max. previously reported for λ2130 and 2010, resp. (cf. *C. A.* **24**, 5633) are to be attributed to the formation of Tl^+ and the neg. ion of the halogen concerned rather than to the ionization of the mol. as previously postulated. The wave lengths involved correspond to an energy excess of 0.7 v. for TlI and 0.6 v. for TlBr above that theoretically required for the process. The photodissocn. into at. ions is a primary process. P. H. P.

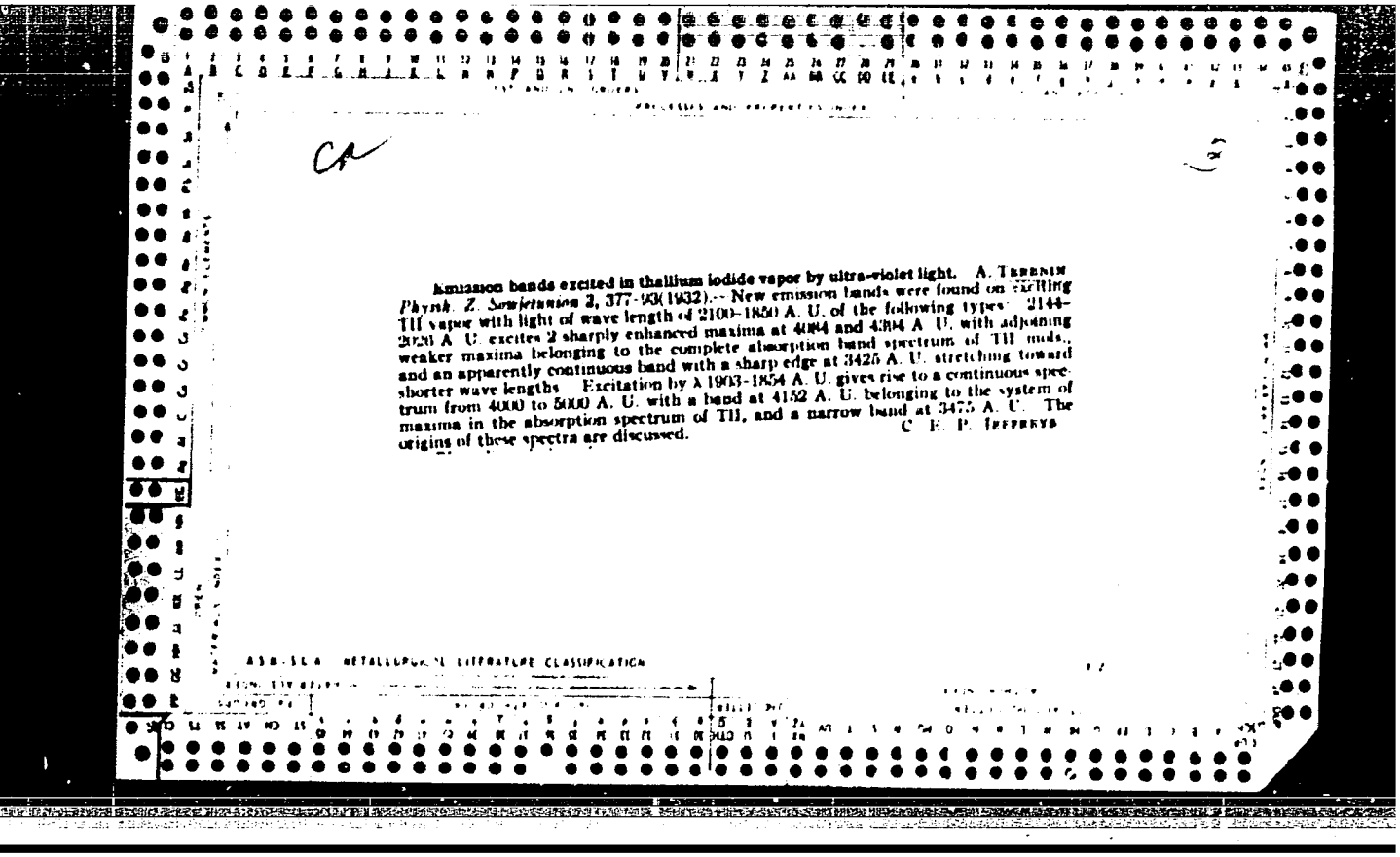
2

Photodissociation of salt molecules into ions. A. Terenin and B. Popov. *Physik. Z. Sowjetunion* 2, 299–318(1932).—Measurements of the wave length for max. photo dissocn. were carried out for TlI, TlBr and TlCl. The values found were 213 mμ for TlI, 201 mμ for TlBr, and 185 mμ for TlCl. The potential-energy curves for the binding energy of the mol. TlI for the normal and ionic state are given. In contrast to the behavior of the alkali halides in the presence of light where the mols. are in the normal ionic state and are transformed by light absorption to the at. type of binding with resulting dissocn., the TlI mol. changes from the normal to the ionic state followed by dissocn. J. H. Webb

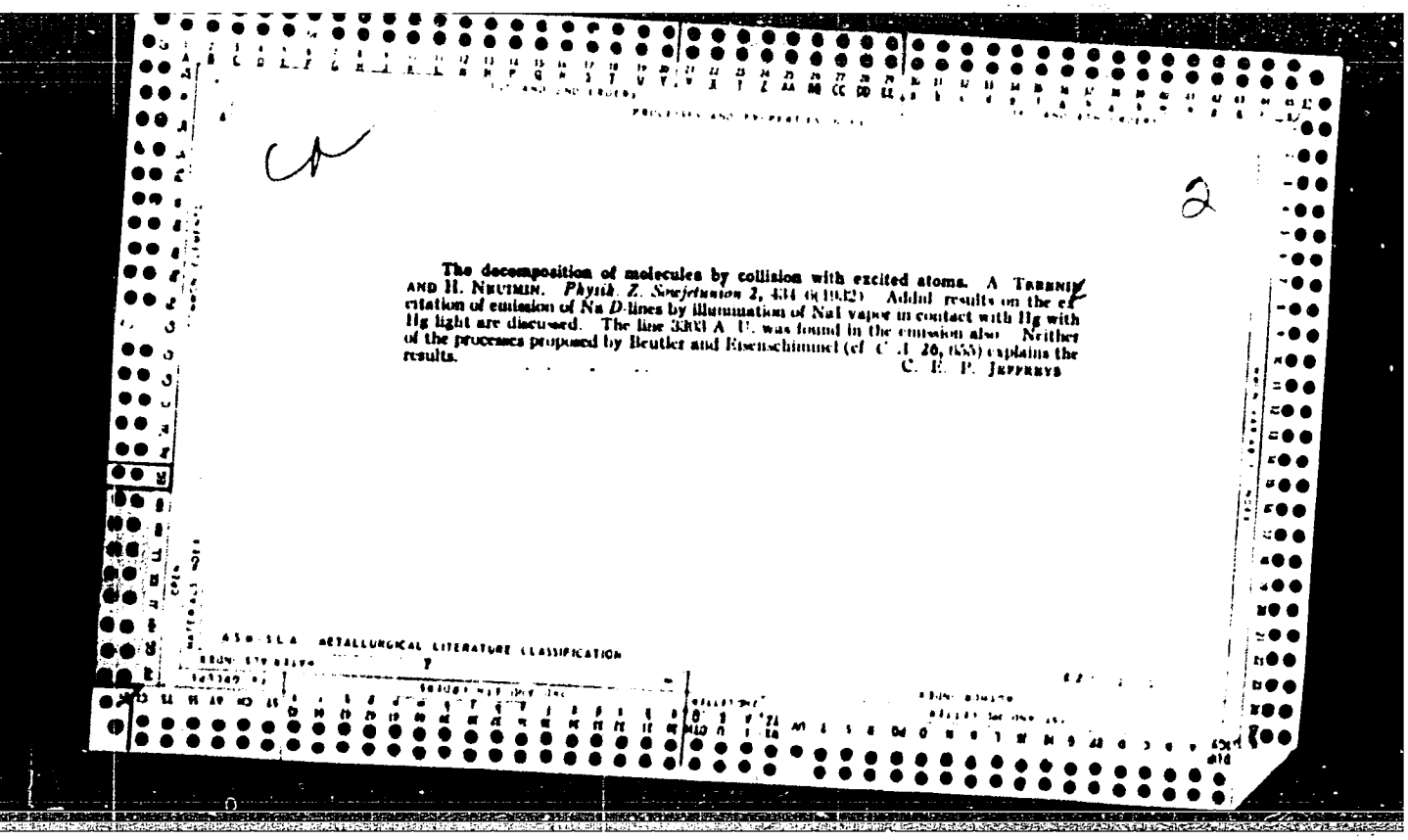
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

The effective cross section for the recombination of atoms with emission of radiation. A. Terenin and N. Prileshaeva. *Physik. Z. Sowjetunion* 2, 337-56(1932). A general relation between the velocity const. of photodissocn. and recombination according to the scheme $h\nu$ + AB ⇄ A' + B is advanced. These consts. are k_ν for the direct process and q_ν for the reverse. This relation $q_\nu/k_\nu = (8\pi^2 I/\mu c^2 h)g/g'\nu^2 = (8\pi^2 I)(g\nu_0/g'\lambda)^2$ allows the effective cross section of the atom for interaction with radiation to be calcd. from the absorption coeff. and the reverse. g' and g are quantum wts. for the excited and non-excited states, s is the symmetry no., and the other symbols have their usual significances. On the basis of present data, the formation of a mol. from atoms with radiation of energy has been calcd. to have a very small probability (10^{-4} – 10^{-6}).

C. F. P. Jeffreys

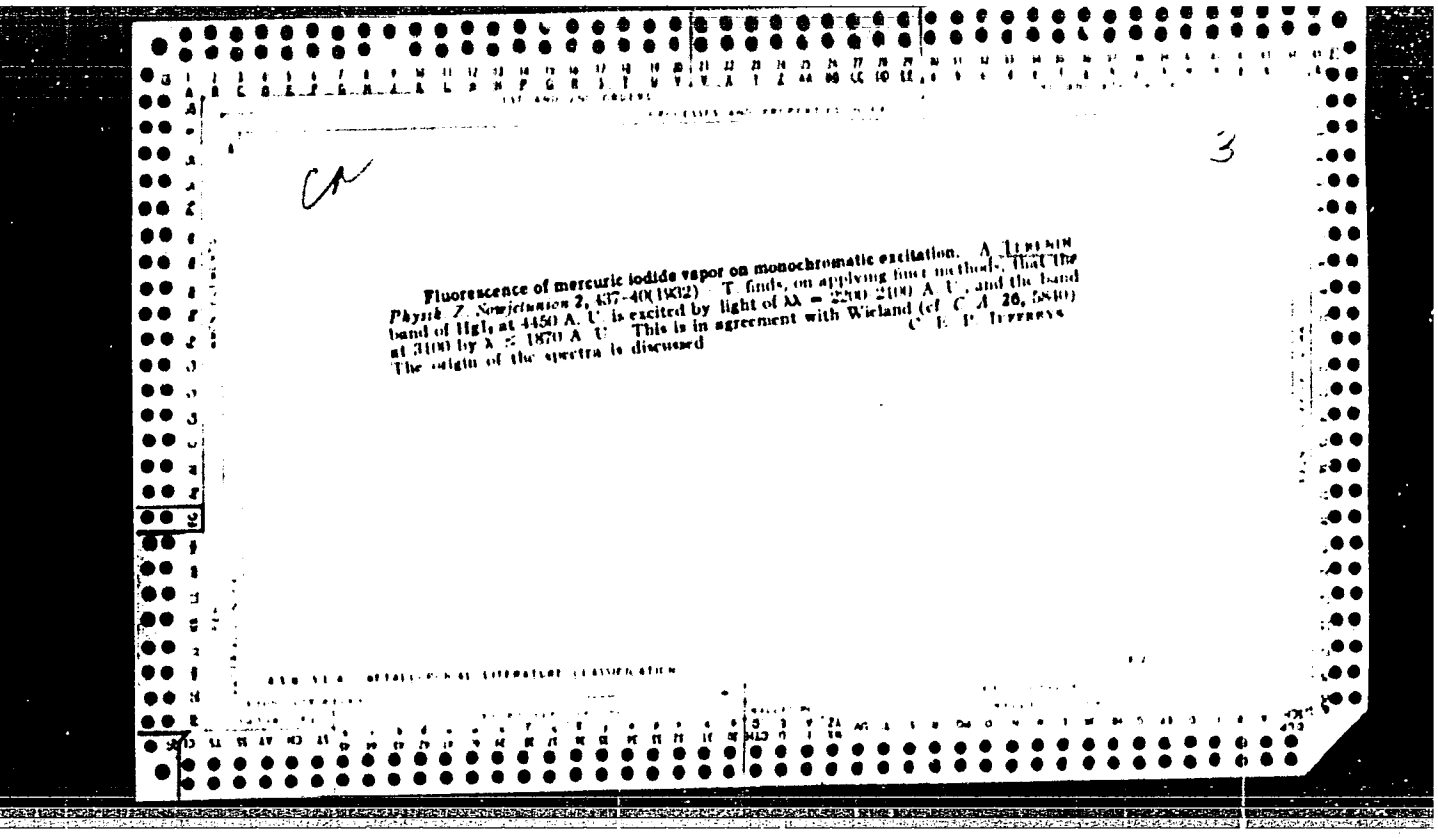


Emission bands excited in thallium iodide vapor by ultra-violet light. A. TERENIN *Physik. Z. Sowjetunion* **2**, 377–93 (1932).—New emission bands were found on exciting TlI vapor with light of wave length of 2100–1850 A. U. of the following types: 2144–2030 A. U. excites 2 sharply enhanced maxima at 4084 and 4304 A. U. with adjoining weaker maxima belonging to the complete absorption band spectrum of TlI mols., and an apparently continuous band with a sharp edge at 3425 A. U. stretching toward shorter wave lengths. Excitation by λ 1903–1854 A. U. gives rise to a continuous spectrum from 4000 to 5000 A. U. with a band at 4152 A. U. belonging to the system of maxima in the absorption spectrum of TlI, and a narrow band at 3475 A. U. The origins of these spectra are discussed.
C. E. P. JEFFREYS

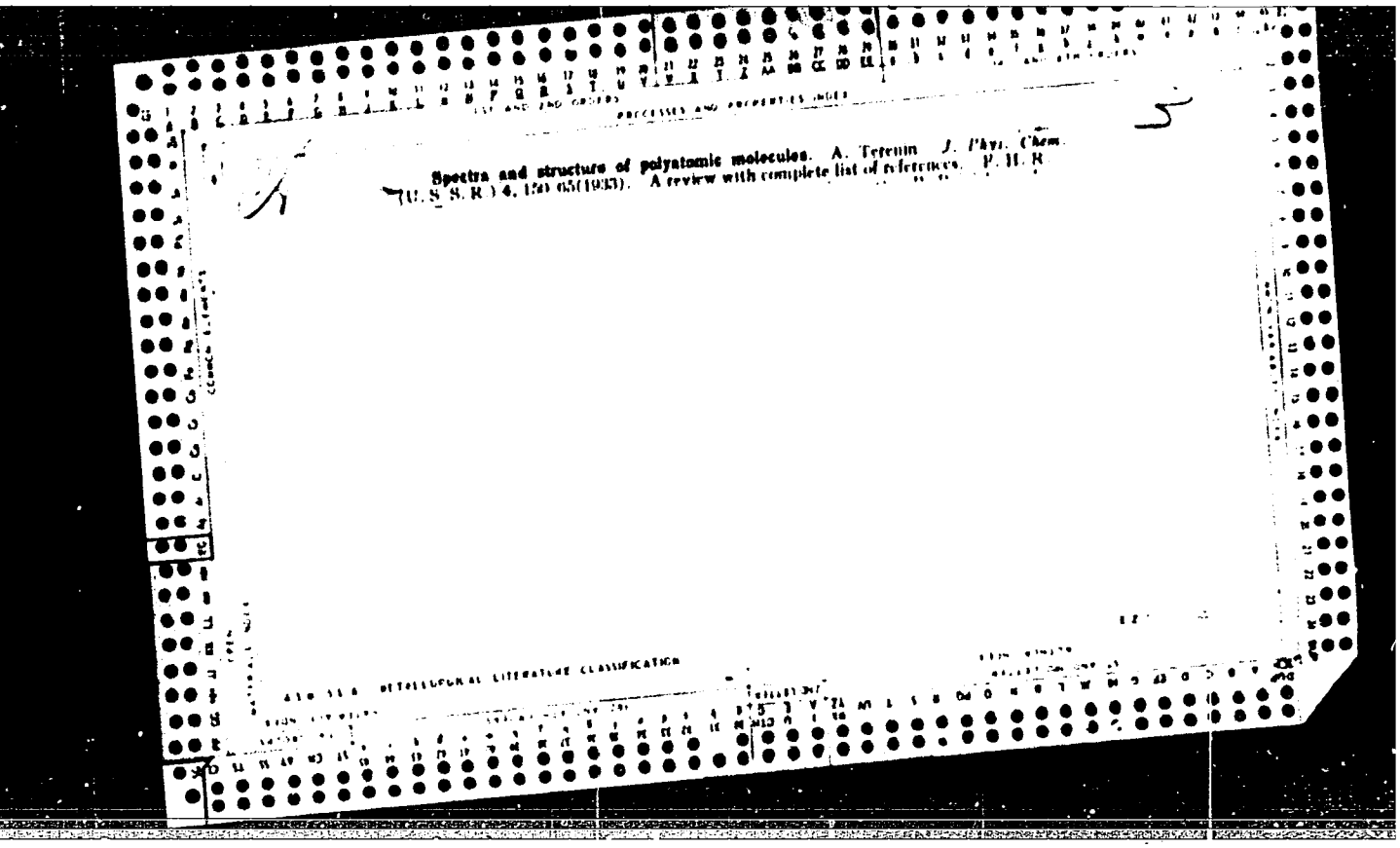


The decomposition of molecules by collision with excited atoms. A. TERENIN AND H. NEUIMIN. *Physik. Z. Sowjetunion* 2, 434 (1932). Addnl results on the excitation of emission of Na *D*-lines by illumination of NaI vapor in contact with Hg with Hg light are discussed. The line 3303 A. U. was found in the emission also. Neither of the processes proposed by Beutler and Eisenschimmel (cf. C. A. 26, 655) explains the results.

C. E. P. JEFFREYS



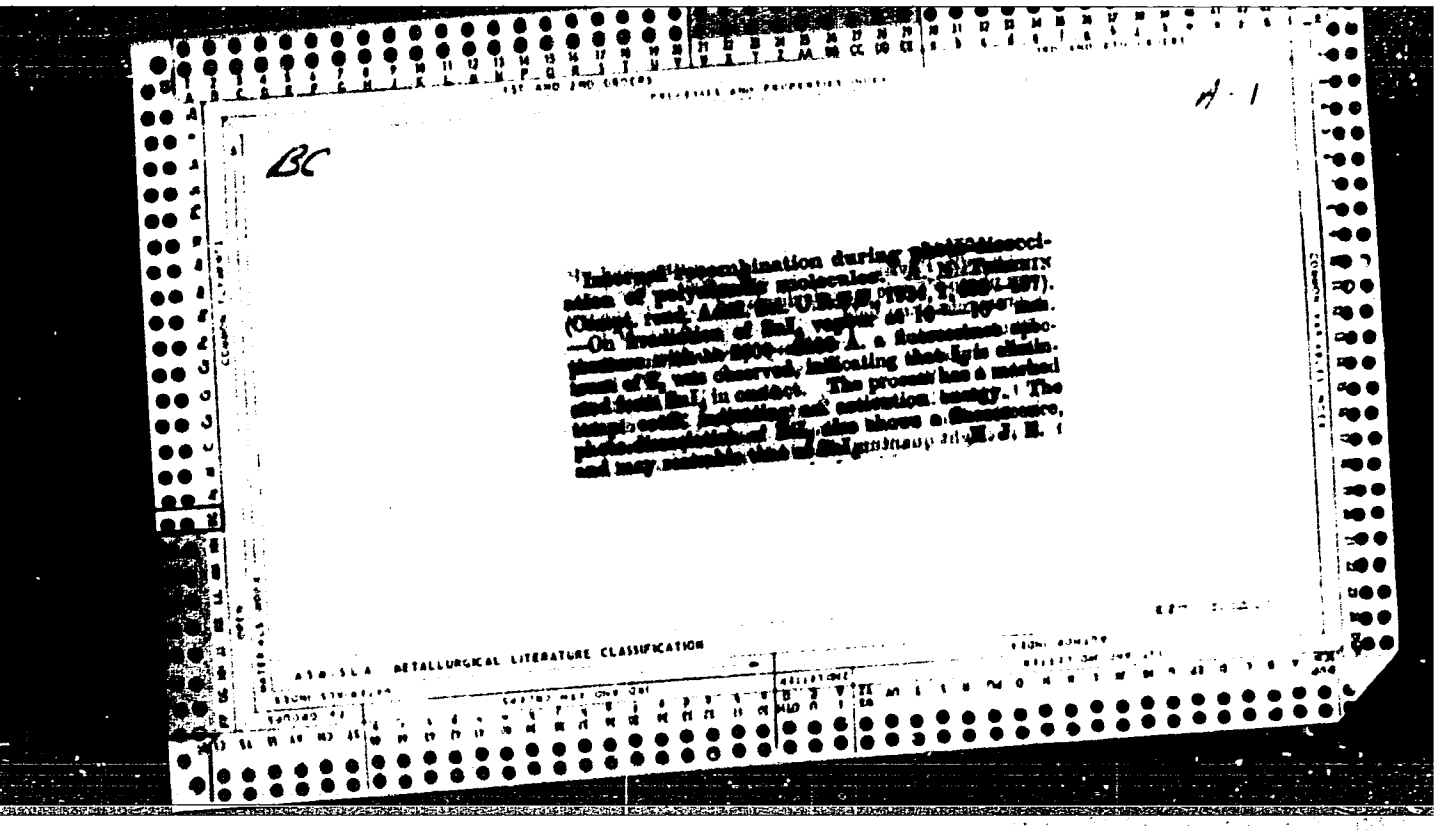
Fluorescence of mercuric iodide vapor on monochromatic excitation. A. Terenin
Physik. Z. Sowjetunion 2, 437-40(1932). T. finds, on applying time methods, that the band of HgI$_2$ at 4450 A. U. is excited by light of λλ = 2200-2100 A. U. and the band at 3100 by λ = 1870 A. U. This is in agreement with Wieland (cf. *C. A.* 26, 5810). The origin of the spectra is discussed. C. F. P. Jeffreys

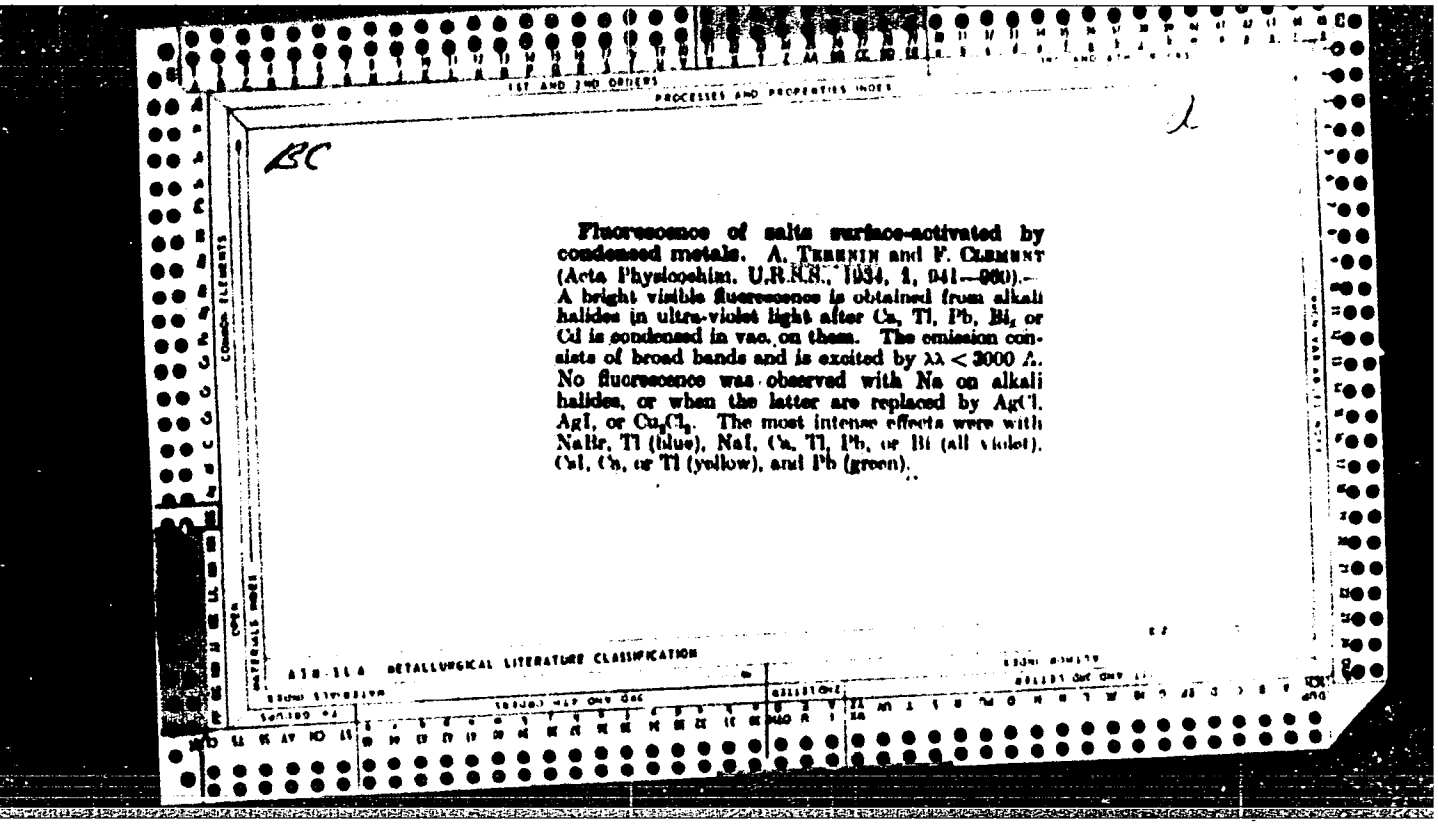


Spectra and structure of polyatomic molecules. A. Terenin J. Phys. Chem. (U.S.S.R.) 6, 1(2) 65(1935). A review with complete list of references. P. H. R.

Photochemical reactions of adsorbed iodine molecules
A. Terenin. *Acta Physicochim.* (U. S. S. R.) 1, 178-80
(1934).—Adsorbed I mols. are dissocd. but not desorbed
by the action of light. The dissocd. adsorbed I can re
act with unsatd. substances, such as the H₂, but when
thallous halide is used as the adsorbing crystal lattice,
The brown color of the I mols. gradually disappears.
light of 5000 A. being most effective. The effect is not
observed on a CaI adsorbent lattice. H also reacts with
a max. at 4000 A., while O reacts for excitation by all
visible light F. H. Rathmann

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION





BC

Fluorescence of salts surface-activated by condensed metals. A. TERENIN and F. CLEMENT (Acta Physicochim. U.R.S.S., 1934, 1, 941—960).—A bright visible fluorescence is obtained from alkali halides in ultra-violet light after Cs, Tl, Pb, Bi_2 or Cd is condensed in vac. on them. The emission consists of broad bands and is excited by $\lambda\lambda < 3000$ Å. No fluorescence was observed with Na on alkali halides, or when the latter are replaced by AgCl, AgI, or Cu_2Cl_2. The most intense effects were with NaBr, Tl (blue), NaI, Cs, Tl, Pb, or Bi (all violet), CsI, Cs, or Tl (yellow), and Pb (green).

Effective cross section in the recombination of atoms on irradiation. A. N. Terenin and N. A. Prilezhaeva. *J. Phys. Chem.* (U.S.S.R.) 5, 1034 12(1934). For the photodissocn.-recombination reaction $h\nu$ + AB ⇌ A' + B the equations $q_r/K_c = (h\nu^3/I\mu c^3 s)(g + g')$ and $\sigma^2 = (h\nu^3/s)g + g' \times (r_0/\lambda)^2$ are given for the values of the consts. of the equil. equation (K_c is the coeff. of mol. absorption for the forward process and q_r the effective cross section for the reverse, μ is the reduced mass of A + B, g and g' are the statistical wts. of excited and normal atoms, I is the light intensity and s the symmetry of the mol). On the basis of known data for the absorption coeff., the recombination of a diat. mol. from the atoms formed by photodissocn. has a probability of the order $\gamma = 10^{-4}$ to 10^{-6}. In particular the cases of Cl_2, HBr, HI, TlI and NaI are discussed.

Eino Hanninen

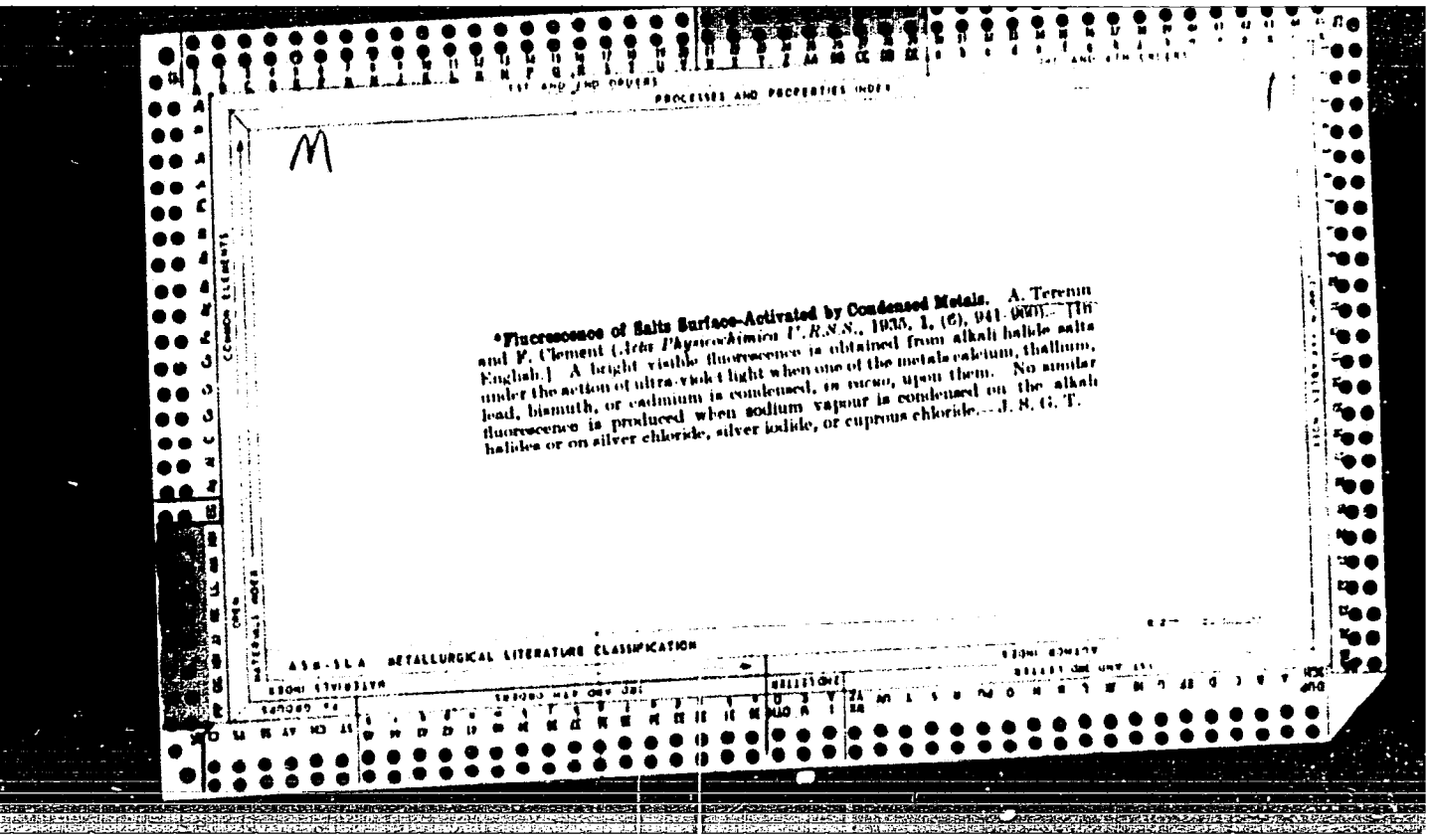
1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

BC

[illegible] of the vapours of some [illegible] compounds. A. T[illegible] and N. P[illegible] (Acta Physicochim. U.R.S.S., 1935, 2, 75[illegible]).—The absorption spectra of $HgMe_2$, $ZnMe_2$, [illegible] and [illegible] were all continuous [illegible] A. For $HgMe_2$ diffuse bands [illegible] A. was also observed. Photo-dissociation occurs [illegible] linking. [illegible] were deposited on irradiating [illegible] and [illegible] with light of $\lambda <$ 2650 and [illegible] A., respectively. On illuminating the vapours of [illegible] and [illegible], the band fluorescence of HgCl and HgBr was observed, showing these mols. to be liberated in an excited state by photo-dissociation. H. J. E.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

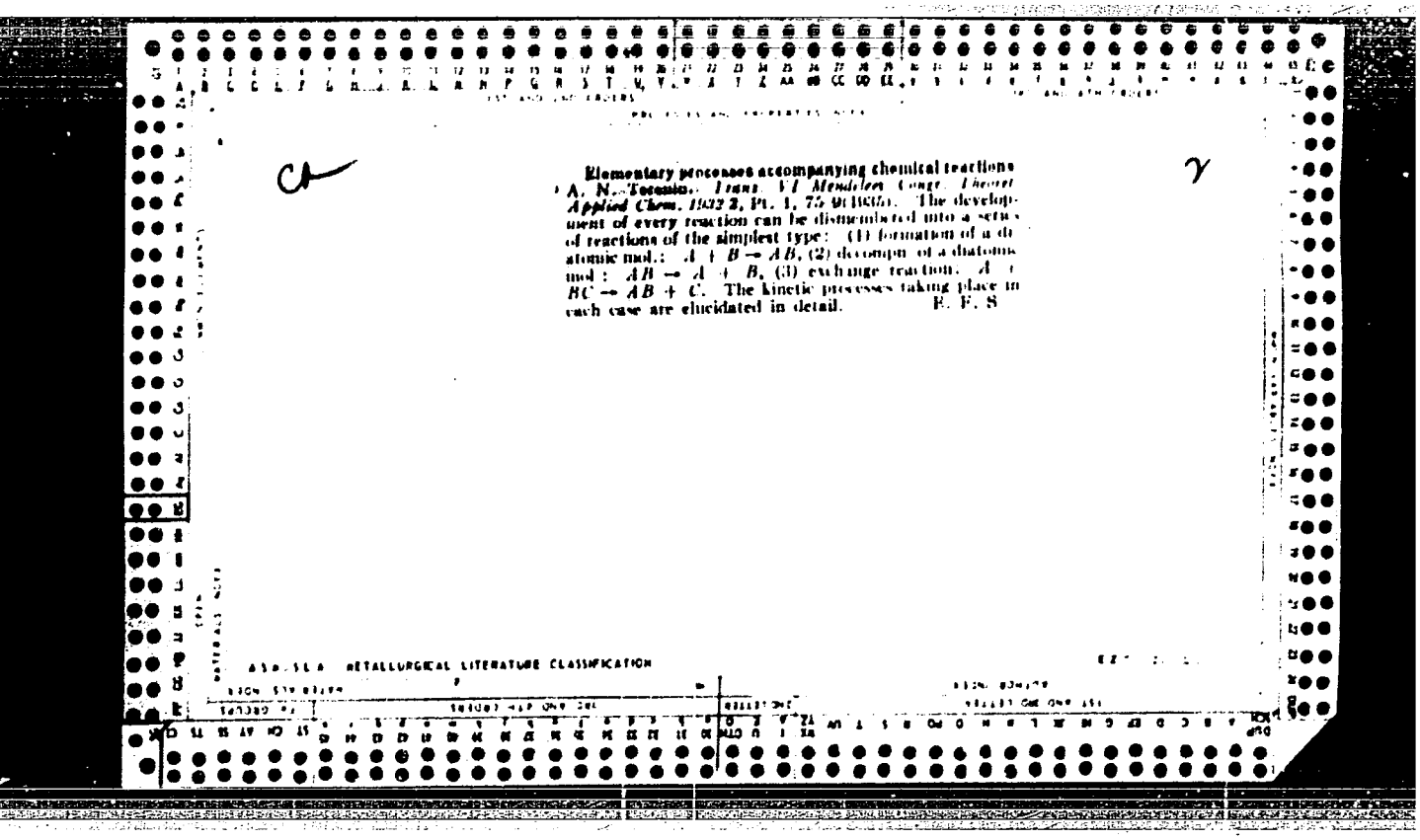


PROCESSES AND PROPERTIES INDEX

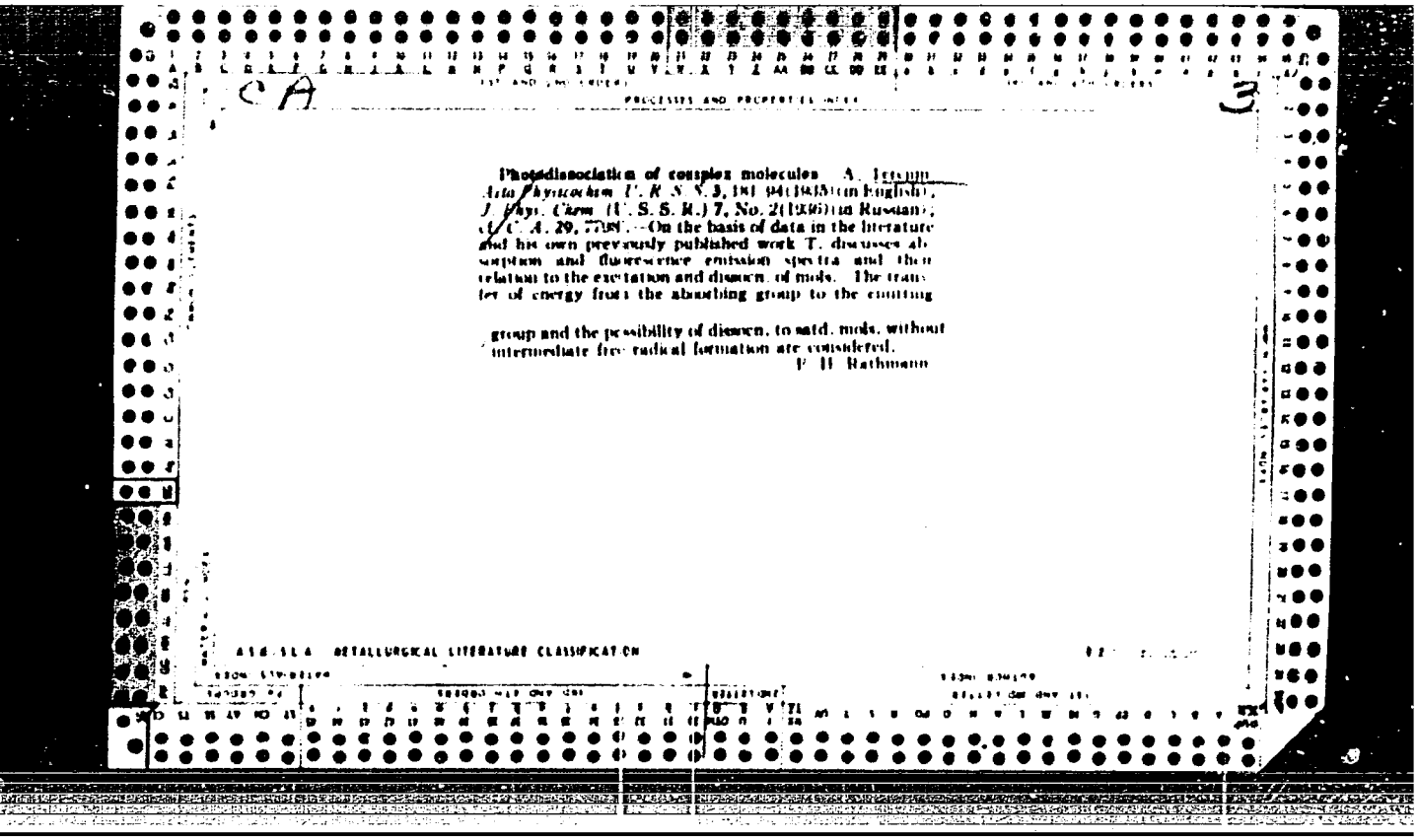
M

***Fluorescence of Salts Surface-Activated by Condensed Metals.** A. Terenin and F. Clement (*Acta Physicochimica U.R.S.S.*, 1935, 1, (6), 941-[illegible]. [In English.] A bright visible fluorescence is obtained from alkali halide salts under the action of ultra-violet light when one of the metals calcium, thallium, lead, bismuth, or cadmium is condensed, in vacuo, upon them. No similar fluorescence is produced when sodium vapour is condensed on the alkali halides or on silver chloride, silver iodide, or cuprous chloride.—J. S. G. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Elementary processes accompanying chemical reactions. A. N. Terenin. *Trans. V. I. Mendeleev Congr. Theoret. Applied Chem. 1932* **2**, Pt. 1, 75–91 (1933). The development of every reaction can be dismembered into a series of reactions of the simplest type: (1) formation of a diatomic mol.: $A + B \rightarrow AB$, (2) decomp. of a diatomic mol.: $AB \rightarrow A + B$, (3) exchange reaction: $A + BC \rightarrow AB + C$. The kinetic processes taking place in each case are elucidated in detail. R. F. S

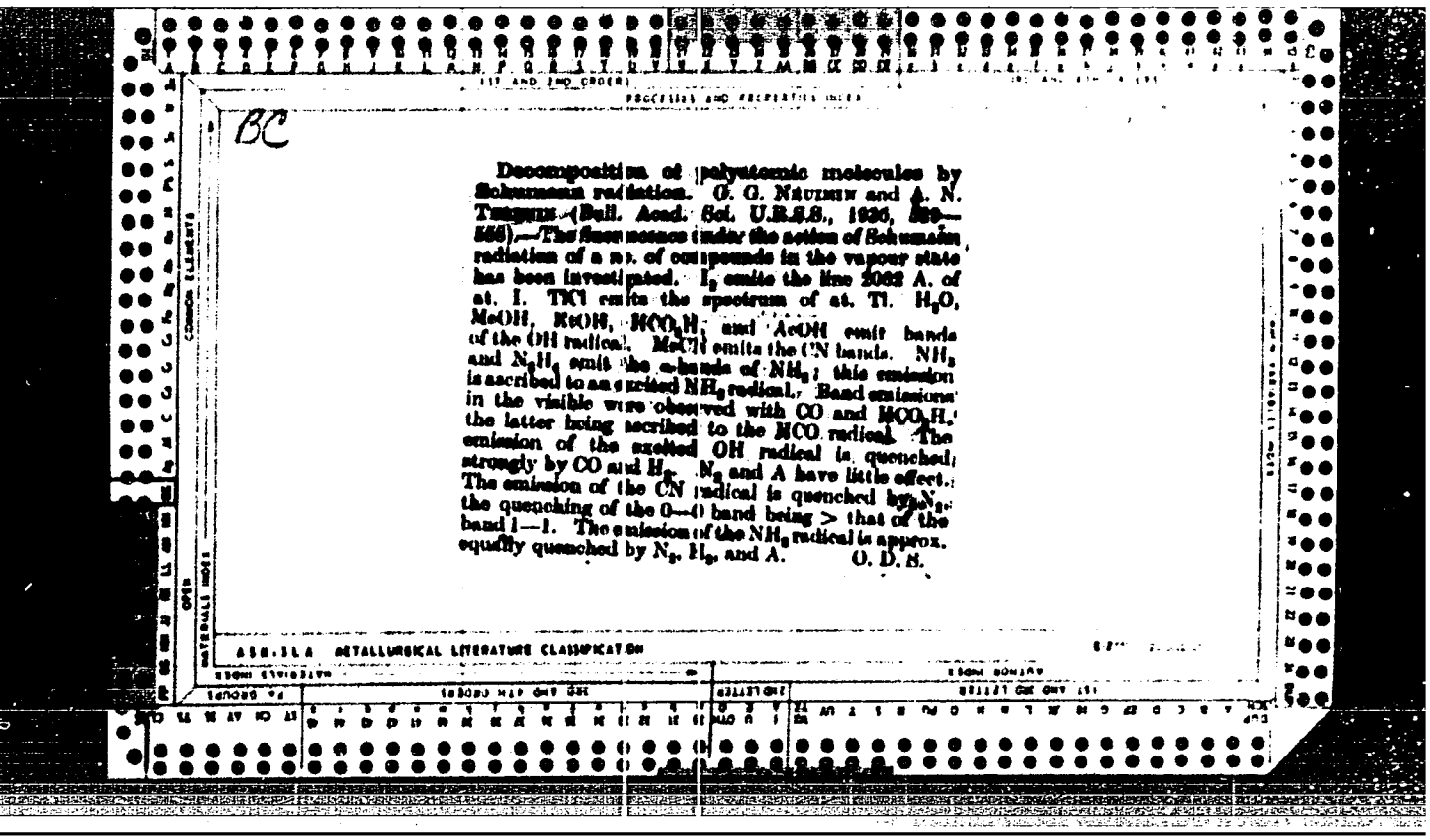


CA

PROCESSES AND PROPERTIES INDEX

Photodissociation of complex molecules A. Terenin. *Acta Physicochim. U. R. S. S.* 3, 181–94 (1935) (in English); *J. Phys. Chem.* (U. S. S. R.) 7, No. 2 (1936) (in Russian); cf. *C. A.* 29, 7038.—On the basis of data in the literature and his own previously published work T. discusses absorption and fluorescence emission spectra and their relation to the excitation and dissocn. of mols. The transfer of energy from the absorbing group to the emitting group and the possibility of dissocn. to satd. mols. without intermediate free radical formation are considered.
P. H. Rathmann

A I S I S L A METALLURGICAL LITERATURE CLASSIFICATION



BC

Decomposition of polyatomic molecules by Schumann radiation. G. G. Nauimow and A. N. Terenin (Bull. Acad. Sci. U.R.S.S., 1936, 555—556).—The fluorescence under the action of Schumann radiation of a no. of compounds in the vapour state has been investigated. I_2 emits the line 2062 A. of at. I. TlCl emits the spectrum of at. Tl. H_2O, MeOH, EtOH, HCO_2H, and AcOH emit bands of the OH radical. MeCl emits the CN bands. NH_3 and N_2H_4 emit the α-bands of NH_2; this emission is ascribed to an excited NH_2 radical. Band emissions in the visible were observed with CO and HCO_2H, the latter being ascribed to the HCO radical. The emission of the excited OH radical is quenched strongly by CO and H_2. N_2 and A have little effect. The emission of the CN radical is quenched by N_2, the quenching of the 0—0 band being > that of the band 1—1. The emission of the NH_2 radical is approx. equally quenched by N_2, H_2, and A.

O. D. S.