

about 700° when the mass of the coke has already become solid. A characteristic property of these coals is a great contraction of the solidified mass of coke which produces fissures. This contraction occurs even in highly pressed material as briquets.

III. Recognition of the effect of the individual petrographic modifications of coal on the coking process. *Ibid* 73-81.—Chem. properties of vitrain, durain and fusain are discussed. Vitraims from Upper Silesia are practically not inferior to vitraims of coking coals. In these coals there arise in the plastic state sufficient quantities of those substances which cause the adherence of the mix into a homogeneous mass. If, therefore, these coals make weaker cokes it is because of the large volatile fraction, lack of expanding pressure, small thermal resistance of bituminous substances, and the contraction of coal during coking. Addn. of durain, even up to 20%, lower the strength of vitrain coke very little; greater admixts. of durain may act markedly, and over 50% may result in strength of coke corresponding to that of durain alone. Coking coal deposits should therefore be characterized with respect to their content of vitrain and durain. Even 3% fusain added to vitrain clearly lowers the strength of coke. The amt. of fusain in a coking coal should be detd. frequently. Upper Silesian coals vary widely in their fusain content. These tests were made also on a series of typical coking coals from England, Belgium, France and Germany. The mech. strength of the cokes was detd. by a small drum test.

IV. Methods of semitechnical and laboratory investigations on the process of coking. *Ibid* 121-8. Cokes very similar to the technical product with respect to mech. strength (as shown by a drum test and Simmerbach crushing test) can be prepd. in a modified form of Wölbiling oven.

V. Semitechnical investigation on the effect of physical conditions and composition of the mix on quality of coke. *Ibid* 141-50. The best rate of heating in the Wölbiling oven was 2° per min. The higher the final temp. of coking the stronger was the coke. The best coke resulted from coal dust of 0-1 mm. fineness. With mixts. of baking coals of similar type the quality of coke is related linearly as the first approximation to the compn. of the mix. This rule should be checked by com. trial. The addn. of coking coal of considerable expansion pressure and appreciable resistance to heat in plastic state proved very profitable. The addn. of semicoke to this coal gives good results, but the nature of this coke must be known exactly, and optimal conditions of semicoking must be known for every coal if it is to improve rather than impair the quality of the coke. The results of these investigations show only where technical effort should be directed. A. C. ZACHLIN

BC

1ST AND 2ND CROSS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH CROSS

B-1-2

Improving the quality of Upper Silesian coke.
 VII. W. SUTKOWSKI, M. CIOCIK, and B. ROGA
 (Pracznik Chem., 1933, 17, 36-33; cf. B., 1933, 5).--
 Profound changes take place in the structure of the
 colloidal constituents of coal heated at < 350°. At
 > 350° coal becomes plastic, and the semi-liquid mass
 so obtained agglomerates into particles, yielding masses
 the coherence of which increases in the order: sand, coke,
 semi-coke, graphite; anthracite, anthracite coal, durain.
 As the temp. approaches 700°, the vol. of gas evolved
 increases; in semi-liquid masses the gas surrounds the
 solid particles, thereby interfering with their impregna-
 tion and agglomeration, while in solidified coke the
 escaping gas gives rise to cracks and fissures. R. T.

COMMON ELEMENTS

COMMON VARIABLE INDEX

OPEN MATERIALS INDEX

ASME-BLA METALLURGICAL LITERATURE CLASSIFICATION

| SECTION | | SECTION | | SECTION | | SECTION | |
|---------|-----|---------|-----|---------|-----|---------|-----|
| GROUP | NO. | GROUP | NO. | GROUP | NO. | GROUP | NO. |
| U | | S | | D | | A | |
| V | | T | | C | | Z | |
| W | | R | | B | | Y | |
| X | | Q | | A | | X | |
| Y | | P | | Z | | W | |
| Z | | O | | Y | | V | |
| | | N | | X | | U | |
| | | M | | W | | T | |
| | | L | | V | | S | |
| | | K | | U | | R | |
| | | J | | T | | Q | |
| | | I | | S | | P | |
| | | H | | R | | O | |
| | | G | | Q | | N | |
| | | F | | P | | M | |
| | | E | | O | | L | |
| | | D | | N | | K | |
| | | C | | M | | J | |
| | | B | | L | | I | |
| | | A | | K | | H | |

CA

21

PROCESSES AND PROPERTIES INDEX

Rational analysis of Polish coal by R. V. Wheeler's method. M. Chorazy. *Przemysl Chem.* 18, 348-54 (1934).--The results of the application of Cockram and Wheeler's method (*C. A.* 21, 2780) to Dabrowa and Upper Silesian coals are described. B. C. A.

ASB. 56 A METALLURGICAL LITERATURE CLASSIFICATION

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

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

B-I-2

Characteristics of caking and non-caking coals.
M. Ozuzar (Fraschyl Chem., 1914, 18, 364-369).--
 Caking coal (I) heated at 180-200° exhibit depolymerization of bitumens, which attains max. intensity at the temp. (400-450°) at which products are obtained of min. adsorptive capacity (II) for methylene-blue, and of max. adsorptive capacity (III) for C₂H₅N vapour. The (II) and (III) curves of non-caking coals and of (I) extracted with C₂H₅N are of the same type, and are characterized by a relatively considerable fall in (II) and an analogous fall in (III) with rise in the temp. at which the coal had been pyrolyzed. R. T.

ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND SERIES 3RD AND 4TH SERIES

CA 21

PROCESSING AND PROPERTY INDEX

Permeability of metallurgical coke as a characteristic property. W. Swietoslawski and M. Chorazy. *Przemysl Chem.* 18, 574-9(1934).—The permeability P —no. of cc. of N_2 passing per min. through 1 sq. cm. of coke under a pressure gradient of 1 mm. Hg) of coke from French coking coal is 243 and 490, and from Westphalian coking coal 10 and 490, and from Silesian caking gas coal 10.7 and 42.7, resp., for samples taken from the center of the oven and from the vicinity of the walls. The P of coke from noncaking coal and pitch briquettes is 310, from peat semicoke and pitch briquettes 10, from peat briquettes 70, from unpressed peat 1442 and for alder charcoal 550. B. C. A.

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

METALLURGICAL LITERATURE CLASSIFICATION

CA 21

PROCESSES AND PROPERTIES INDEX

Production of semicoke and coke from noncaking coal.
 I. W. Swietochowski and M. Chorazy. *Przemysl Chem.*
 18, 579-80(1934).—The mech. properties of coke from
 briquettes made from noncaking coals and pitch have
 been studied with reference to the temp. and pressure of
 briquetting, to the relative proportions of the constituents,
 and to the type of coal taken. The permeability to gases,
 combustibility, reactivity and mech. strength of coked
 briquettes prepd. under appropriate conditions may be
 greater than that of Ruhr basin cokes. Raising the
 pressure to greater than 150 atm. has little effect on the
 mech. strength of the cokes. B. C. A.

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION

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

CA

21

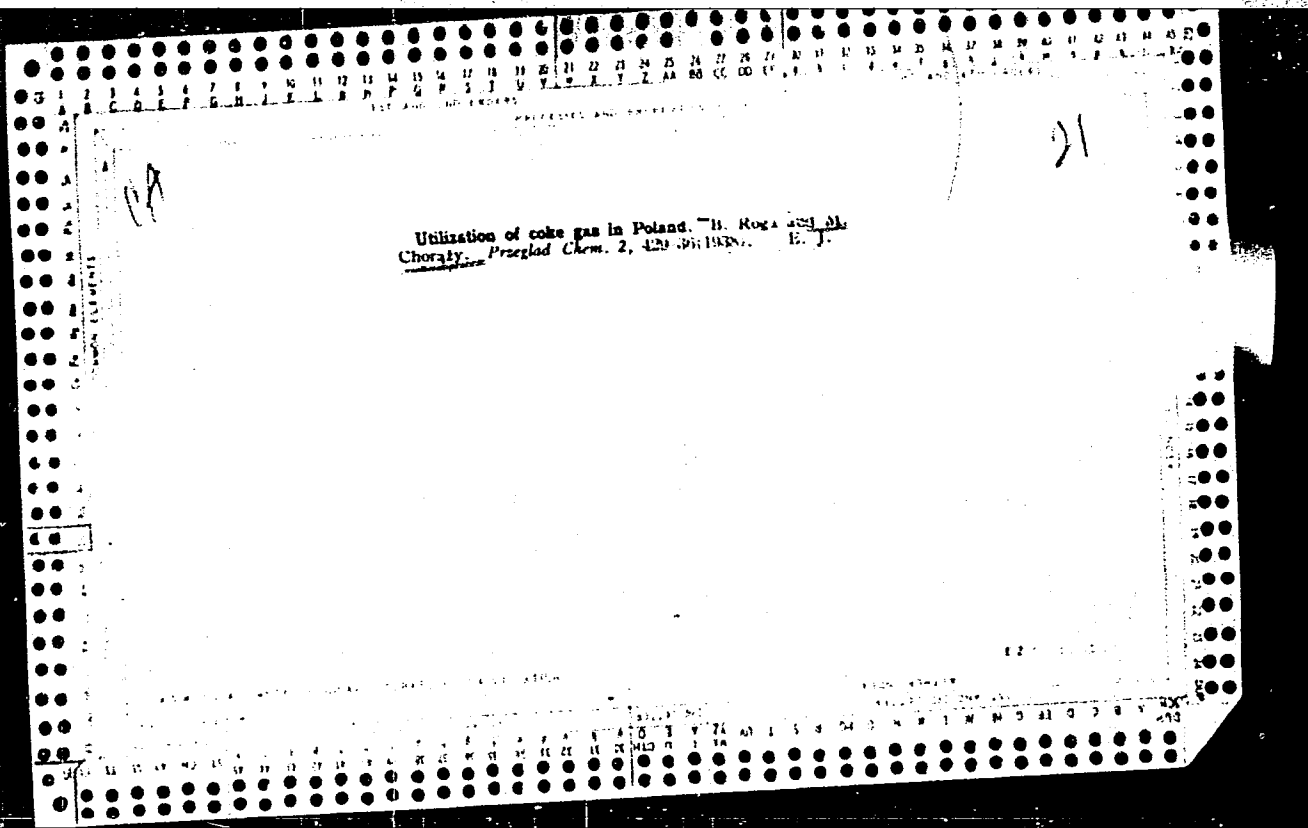
PROCESSES AND PROPERTIES INDEX

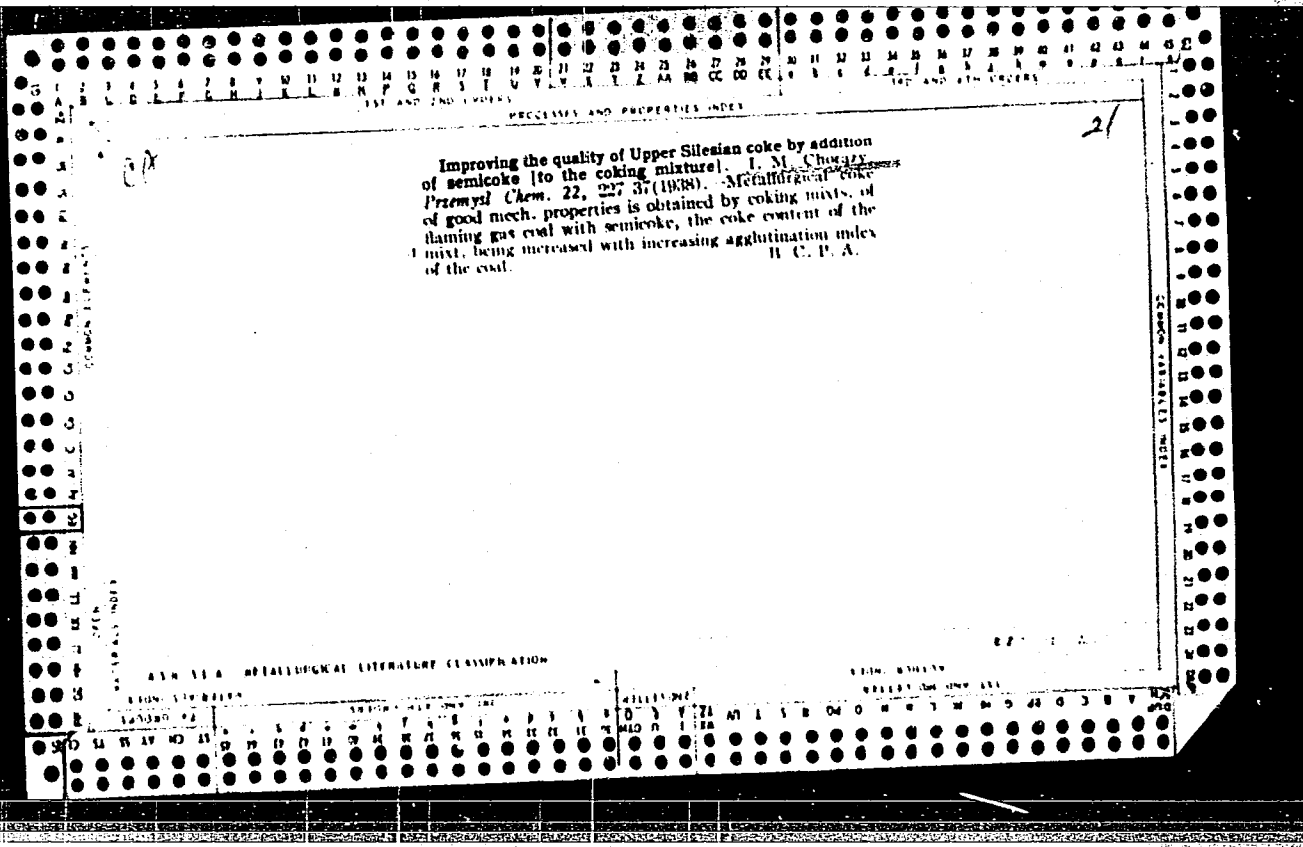
Process of formation of coke. M. Chlora and T. Chmieleński. *Przemysł Chem.* 19, 117-221 (1940). Permeability of *semicokes* and cokes secured from coal at temp. from 450° to 1000° was investigated by a method worked out by the Coal Department of the Polish Chem. Research Inst. The app. is described briefly. Decidedly different permeabilities of cokes may be shown depending on the coal from which they are derived as well as the temp. at which they were obtained. The permeability of coke obtained at high temp. from coking coals rises to a max. value while that for cokes obtained at various temps. from gas-flaming caking coals possesses 2 distinct maxima corresponding with those of enhanced degassing of coal. Depending on the rate of heating not only different values of permeability of a given coal may be obtained but even the character of the permeability curve may be altered. The fundamental shape of the temp.-permeability curve is not changed by varying the grain size of coke, but larger grains are likely to increase the permeability values at the given temps. The addn. of bituminous substances leads to increased permeability of semicokes and cokes without changing the character of the curves, but the addn. of debituminized materials (*semicoke, pit-head coal slack*, and hard coals) not only increase permeability generally but also shift the temp. of max. permeability. When mixed with *virrain, durain* produces an increase in permeability but *fussin* has no significant effect.

A. C. Zachlin

ASB-ILA METALLURGICAL LITERATURE CLASSIFICATION

LEGEND: M, B, L, I, S, C, O, H, R, D, A, V, N, F, G, E, J, K, P, Q, R, S, T, U, X, Y, Z, AA, AB, AC, AD, AE, AF, AG, AH, AI, AJ, AK, AL, AM, AN, AO, AP, AQ, AR, AS, AT, AU, AV, AW, AX, AY, AZ, BA, BB, BC, BD, BE, BF, BG, BH, BI, BJ, BK, BL, BM, BN, BO, BP, BQ, BR, BS, BT, BU, BV, BW, BX, BY, BZ, CA, CB, CC, CD, CE, CF, CG, CH, CI, CJ, CK, CL, CM, CN, CO, CP, CQ, CR, CS, CT, CU, CV, CW, CX, CY, CZ, DA, DB, DC, DD, DE, DF, DG, DH, DI, DJ, DK, DL, DM, DN, DO, DP, DQ, DR, DS, DT, DU, DV, DW, DX, DY, DZ, EA, EB, EC, ED, EE, EF, EG, EH, EI, EJ, EK, EL, EM, EN, EO, EP, EQ, ER, ES, ET, EU, EV, EW, EX, EY, EZ, FA, FB, FC, FD, FE, FF, FG, FH, FI, FJ, FK, FL, FM, FN, FO, FP, FQ, FR, FS, FT, FU, FV, FW, FX, FY, FZ, GA, GB, GC, GD, GE, GF, GG, GH, GI, GJ, GK, GL, GM, GN, GO, GP, GQ, GR, GS, GT, GU, GV, GW, GX, GY, GZ, HA, HB, HC, HD, HE, HF, HG, HH, HI, HJ, HK, HL, HM, HN, HO, HP, HQ, HR, HS, HT, HU, HV, HW, HX, HY, HZ, IA, IB, IC, ID, IE, IF, IG, IH, II, IJ, IK, IL, IM, IN, IO, IP, IQ, IR, IS, IT, IU, IV, IW, IX, IY, IZ, JA, JB, JC, JD, JE, JF, JG, JH, JI, JJ, JK, JL, JM, JN, JO, JP, JQ, JR, JS, JT, JU, JV, JW, JX, JY, JZ, KA, KB, KC, KD, KE, KF, KG, KH, KI, KJ, KK, KL, KM, KN, KO, KP, KQ, KR, KS, KT, KU, KV, KW, KX, KY, KZ, LA, LB, LC, LD, LE, LF, LG, LH, LI, LJ, LK, LL, LM, LN, LO, LP, LQ, LR, LS, LT, LU, LV, LW, LX, LY, LZ, MA, MB, MC, MD, ME, MF, MG, MH, MI, MJ, MK, ML, MM, MN, MO, MP, MQ, MR, MS, MT, MU, MV, MW, MX, MY, MZ, NA, NB, NC, ND, NE, NF, NG, NH, NI, NJ, NK, NL, NM, NN, NO, NP, NQ, NR, NS, NT, NU, NV, NW, NX, NY, NZ, OA, OB, OC, OD, OE, OF, OG, OH, OI, OJ, OK, OL, OM, ON, OO, OP, OQ, OR, OS, OT, OU, OV, OW, OX, OY, OZ, PA, PB, PC, PD, PE, PF, PG, PH, PI, PJ, PK, PL, PM, PN, PO, PP, PQ, PR, PS, PT, PU, PV, PW, PX, PY, PZ, QA, QB, QC, QD, QE, QF, QG, QH, QI, QJ, QK, QL, QM, QN, QO, QP, QQ, QR, QS, QT, QU, QV, QW, QX, QY, QZ, RA, RB, RC, RD, RE, RF, RG, RH, RI, RJ, RK, RL, RM, RN, RO, RP, RQ, RR, RS, RT, RU, RV, RW, RX, RY, RZ, SA, SB, SC, SD, SE, SF, SG, SH, SI, SJ, SK, SL, SM, SN, SO, SP, SQ, SR, SS, ST, SU, SV, SW, SX, SY, SZ, TA, TB, TC, TD, TE, TF, TG, TH, TI, TJ, TK, TL, TM, TN, TO, TP, TQ, TR, TS, TT, TU, TV, TW, TX, TY, TZ, UA, UB, UC, UD, UE, UF, UG, UH, UI, UJ, UK, UL, UM, UN, UO, UP, UQ, UR, US, UT, UU, UV, UW, UX, UY, UZ, VA, VB, VC, VD, VE, VF, VG, VH, VI, VJ, VK, VL, VM, VN, VO, VP, VQ, VR, VS, VT, VU, VV, VW, VX, VY, VZ, WA, WB, WC, WD, WE, WF, WG, WH, WI, WJ, WK, WL, WM, WN, WO, WP, WQ, WR, WS, WT, WU, WV, WW, WX, WY, WZ, XA, XB, XC, XD, XE, XF, XG, XH, XI, XJ, XK, XL, XM, XN, XO, XP, XQ, XR, XS, XT, XU, XV, XW, XX, XY, XZ, YA, YB, YC, YD, YE, YF, YG, YH, YI, YJ, YK, YL, YM, YN, YO, YP, YQ, YR, YS, YT, YU, YV, YW, YX, YY, YZ, ZA, ZB, ZC, ZD, ZE, ZF, ZG, ZH, ZI, ZJ, ZK, ZL, ZM, ZN, ZO, ZP, ZQ, ZR, ZS, ZT, ZU, ZV, ZW, ZX, ZY, ZZ.





1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

21

Development of Polish coke industry in the years 1922-1938. Michał Chorały. *Przebieg Chem.* 3, 116-24 (1939). Review with 3 tables and 2 diagrams. K. Jozefowicz

COMMON ELEMENTS

COMMON SYMBOLS

OPEN

MATERIALS INDEX

ASB-ISA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

CHORAZY, Michal

Chem abn 448
1-25-54
Sulfo + Carbonization
Products

Effect of heating in the atmosphere of various gases on the plasticity of bituminous coals. Michal Chorazy and Kazimierz Formkow. *Biul. Inst. Nauk-Badawczego Przemyslu Węglowego (Katowice), Komun.* No. 31, 20 pp. (1948).—Samples of 7 Polish coals were heated for 30–45 min. at 100–180° in the atm. of air, N, NH₃, CO₂, steam, or SO₂, after which their plasticity range was detd. by the Gieseler method (C.A. 28, 4567^o). The plasticity curves of oxidized samples are generally lower than those of unoxidized samples, but the changes in the curves and the max. are irregular and cannot be used as a basis for classifying the coals with respect to coking properties. The effect of N, NH₃, and CO₂ is slight, but that of steam is appreciable, particularly at temps. close to the beginning of the plasticity range. The oxidizing effect of SO₂ is greater than that of air.
Bruno C. Metzner

5
Fuel

VORBRODT, K.; CHORAZY, M.

Cytochemical and cytophotometric studies on the effect of actinomycin D on the cells of the regenerating liver of a rat poisoned with thioacetamide. Bull. acad. Pol. sci. (Biol) 13 no.3:131-137 '65.

1. Submitted December 31, 1964.

CHORAZY, M.; GRABOWSKA, M.

Inhibition of RNA and protein synthesis in cell culture by actinomycin D. Bull. acad. Pol. sci. [Biol.] 13 no.4:195-199 '65.

1. Submitted January 2, 1965.

CHORAZY, Mieczyslaw.

Simple type of a chamber for metabolic studies. Acta physiol.
polon. 6 no.4:455-457 1955.

1. Z Instytutu Onkologii Oddzial w Gliwicach Dyrektor: dr J.Swiedki
Zaklad Biologii Nowotworow. Kierownik: prof. dr K.Dux.

(METABOLISM,
chamber for determ. of metab. in animals (Pol))

CHORAZY, M.

3892. Nitrogen balance in tumour bearing rats. M. Chorazy.
Acta biochim. polon., 1956, 3, 131-148 (Oncology).

Chorzely, M.

✓ Nitrogen balance in tumor-bearing rats. M. Chorzely
(Inst. Oncol., Gliwice, Poland). *Bull. acad. Polon. sci.*
Class II, 4, 7-12 (1956) (in English).—White male rats were
implanted with sarcoma (type not stated). All feeding was
by stomach tube given 3 times/day and the diet consisted of
1.8 g. of protein, 11.0 g. of carbohydrate, and 1.0 g. of fat
each day. After 2 weeks the tumor-bearing rats had both a
greater wt. and a greater pos. N balance than the controls
but the differences were all present in changes in the tumor.
The higher N balance was due to a lower excretion of N in
the urine. The N retention in the body of the tumor-bearing
rats increased simultaneously with the increase of the tumor
wt. but at a slower rate than the tumor-wt. gain. No
loss of body wt. was observed in these force-fed tumor-bearing
rats. There was greater tumor-wt. gain than could be
explained by the amt. of N retained and this was detd. by
analysis as due to a decrease of the N/unit wt. of the tumor,
as the tumor mass increased. Frank Ibcy

AD (1)

EXCERPTA MEDICA Sec 16 Vol. 5/7 Cancer July 57

2489. CHORAŻY M. Dept. of Tumour Biol., Inst. of Oncol., Gliwice *The effect of removal of a tumour on the nitrogen balance in rats* Bull. acad. polon. Sci. 1956, 4/10 (351-355) Graphs 4

The nitrogen retention in the organism of tumour-bearing rats decreased after removal of the tumour and within a few days achieved the same level as in normal rats. The rate of the increase in body weight of tube-fed rats after removal of the tumour was about the same as in normal rats. The drop in nitrogen retention after removal of the tumour was not caused by the operative trauma as was ascertained in several experiments in which the influence of trauma on the nitrogen balance in normal, normal-adrenalectomized, tumour-bearing and tumour-bearing-adrenalectomized rats was investigated.

Dux - Warsaw

JANUSZKIEWICZ, Stanislaw; CHORAZY, Mieczyslaw; KUCHCINSKI, Ryszard

Primary tumors of the bone in the material of the Gliwice section
of the Institute of Oncology. Polski przegl. radiol. 20 no.1:
41-51 Jan-Feb 56.

1. Z Instytutu Onkologii--Oddzial w Gliwicach--Dyrektor dr. med.
J. Swiecki. Zakladu Diagnostyki Radiolog. --Kier. prof. dr. med.
S. Januszkiewicz Gliwice, ul. Sienkiewicza 13.
(BONES, neoplasms,
hosp. statist. (Pol))

POLAND/General Problems of Pathology - Tumors. Metabolism.

U.

Abs Jour : Ref Zhur - Biol., No 2, 1959, 8747

Author : Chorazy, M.

Inst : ~~Z Insty Ty Ty~~ ONKolo. -- 00

Title : The Effect of Operative Removal of a Tumor on the Nitrogen Balance in Rats.

Orig Pub : Acta biochim. polon., 1957, 4, No 1, 23-32

Abstract : A nitrogen retention 50% higher than normal was demonstrated in rats 24 days after the transplantation of sarcomata into them. Four days after the sarcomata were removed the nitrogen balance returned to normal. A recurrence between the 5th-9th day after the operation was again accompanied by a nitrogen retention. Preliminary extirpation of the suprarenals led to a slower return of the nitrogen balance to normal in the rats after the removal of the sarcoma. -- S.Ya. Marmorshteyn

Card 1/1

- 24 -

CHORAZY, Mieczyslaw

**Problem of chemotherapy of neoplasms. II. Postepy wiedzy med.
4 no.2:145-184 Apr-June 57.**

**(CYTOTOXIC DRUGS, therapeutic use,
cancer, review (Pol))**

POLAND/General Problems of Pathology - Tumors. Metabolism.

U.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 98161

Author : Chorazy, M.

Inst : --

Title : Nitrogen Balance in Rats with a Grafted Sarcoma.

Orig Pub : Acta biochim. polon., 1956, 3, No 2, 131-148.

Abstract : To rats with a transplant of sarcoma, food was administered through a catheter which contained a constant amount of N and which assured a positive nitrogen balance. 2 weeks after grafting, a gain in weight of the body and intensive retention of N were noted. The tumors, in accordance with the progress of their growth, were losing N.--
I.S. Neyfel'd

Card 1/1

- 13 -

EXCERPTA MEDICA Sec 16 Vol 7/11 Cancer November 59

4582. **Effects of sarcoma grafting, tumour extirpation, starvation, adrenalectomy and cortisone on arginase activity in the liver of rats** CHORAZY M. Dept. of Tumour Biol., Inst. of Oncol., Gliwice *Bull. Acad. pol. Sci. Cl. 2* 1958, 6/10 (407-412) Graphs 1 Tables 2

Arginase activity in the liver of sarcoma-bearing Wistar rats was roughly 30% below that in healthy animals. After surgical removal of the tumour, arginase activity increased to become normal again between the 9th and the 14th day. In healthy rats adrenalectomy was followed by a gradual decrease of arginase activity of the liver. Cortisone given to healthy rats in small doses (0.8 mg./animal/day) slightly increased arginase activity, but large doses (5.0 mg.) caused a decrease already after 48 hr. Following 7 days of starvation, arginase activity became slightly reduced as compared to control animals. The technique of the arginase determination is presented; the number of rats used is not given.

GHORAZY, Mieczyslaw

Problem of nitrogen metabolism in a tumor-bearing organism, Postepy
hig. med. dosw. 12 no.3:263-282 1958.

1. Zaklad Biologii Nowotworow. Instytutu Onkologii. Gliwice, Wybrzeze
Czerwonej Armii 15.

(NITROGEN, metab.
in cancer, review (Pol))

(NEOPLASMS, metab.
nitrogen, review (Pol))

EXCERPTA MEDICA Sec 2 Vol 12/10 Physiology Oct 59

4924. EXPERIMENTAL CHEMOTHERAPY OF TUMOURS WITH HYDROGEN PEROXIDE - Chorazy M., Gettlich A., Góral L., Kolo-
czek B., Molawka E., Penar B. and Szweda Z. Dept. of
Tumour Biol., Inst. of Oncol., Gliwice - NATURE (Lond.) 1958, 182/4632
(395-396) Graphs 3 Tables 1

It is believed that an inhibitory effect on certain kinds of tumours may sometimes be brought about by nutritional changes (diminished food intake or direct action of hydrogen peroxide on some essential constituents of ingested food) resulting from the drinking of hydrogen peroxide solutions.

Fischer - Buenos Aires (II, 5, 16)

EXCERPTA MEDICA Sec 16 Vol 7/11 Cancer November 59

***4572. Influence of tumour, adrenalectomy and starvation on electrophoretic pattern of rat serum** Wplyw nowotworu, adrenalectomii i glodzenia na elektroforytyczny wzór białek krwi u szczura. CHORAZY M. Zakl. Biol. Nowotw., Inst. Onkol., Oddz., Gliwice *Nowotwory* 1959, 9/2 (127-132) Graphs 1 Tables 1
The serum protein pattern was examined electrophoretically in Wistar rats: (1) with transplantable sarcoma or Guérin carcinoma; (2) after starvation; (3) after adrenalectomy; (4) after treatment with cortisone. Tumour-bearing rats showed a serum protein pattern similar to that encountered in acute adrenal insufficiency, and consisting in a decreased protein level, hypoalbuminaemia, a considerable increase in α_1 -globulins and a slightly lower increase of α_2 -globulins. Seven days' starvation did not induce these changes, except in the γ -globulins. It may be assumed that hypofunction of the adrenal cortex is responsible for these electrophoretic alterations.

Albert - Wroclaw

CHORAZY, Mieczyslaw

Studies on the penetration of desoxyribonucleic acid into Ehrlich exudative carcinoma cells. Postepy hig. med. dosw. 16 no.1:37-83 '62.

1. Z Instytutu Onkologii w Gliwicach Dyrektor: dr J. Swiecki.
(NEOPLASMS exper) (DESOXYRIBONUCLEIC ACID metab)

SCHNIEBERG, Krzysztof; CHORAZY, Mieczyslaw

Content of lipid bodies in the erythrocytes of black C-57 mice in relation to the lieno-hepatic system. Acta physiol. polon. 13 no.2: 293-299 '62.

1. Z Instytutu Onkologii, Oddział w Gliwicach Dyrektor: dr J. Swiecki Z Zakładu Analiz Klinicznych Instytutu Kierownik: dr K. Schneider Z Zakładu Biologii Nowotworow Instytutu Kierownik: dr M. Chorazy.

(SPLEEN physiol) (LIVER physiol) (LIPIDS blood)
(ERYTHROCYTES metab)

POLAND

A. VORBRODT, M. CHORAZY and T. WILCZOK, Department of Tumor Biology,
Institute of Oncology (Zaklad Biologii Nowotworow, Instytut Onkologii),
Gliwice.

"Autoradiographic Studies on In Vitro Uptake of Heterologous RNA and DNA
by Isolated Normal and Neoplastic Neoplastic Nuclei."

Warsaw, Bulletin de l'Academie Polonaise des Sciences, Serie des
Sciences Biologiques, Vol 10, No 10, 1962; pp 417-420.

Abstract [English article]: Study of penetration of C¹⁴ or H³ -labelled
RNA or DNA into nuclei of rat thymus, liver or Novikoff hepatoma cells:
ATP increased incorporation; DNase decreased radioactivity. Highest
incorporation was observed in the liver, less in thymus and hepatoma.
Two tables, 6 microphotographs; 5 Polish and 7 Western references.

1/1

VORBRODT, A.; CHORAZY, M.; WILCZOK, T.

Autoradiographic studies on *in vitro* uptake of heterologous RNA and DNA by isolated normal and neoplastic nuclei. *Bul Ac Pol biol* 10 no.10:417-420 '62.

1. Department of Tumor Biology, Institute of Oncology, Gliwice.
Presented by J. Heller.

CHORAZY, Mieczyslaw

Use of nucleic acids labeled with radioisotopes. Pol. arch. med.
wewn. 34 no. 6:742-743 '62

1. Z Zakładu Biologii Nowotworów Instytutu Onkologii w Gliwicach
(Kierownik doc. dr. M. Chorazy).

3866

624.91 : 691.11.003

Chorąży R. An Economic Type of Wooden Roof Designed by Kopkowiec. *MT*

„Oszczędnościowy dach drewniany według projektu inż. F. Kopkowiec”. Inżynieria i Budownictwo. No. 7, 1954, pp. 202—206, 2 figs., 7 tabs.

The demands of economic policy after World War II for savings in timber have called for new solutions concerning the construction of roof trusses, designed primarily on the basis of static computations. The Kopkowiec truss design involves a number of changes, but in principle retains the purlin-clamp system. Savings in timber amount to 36%. The truss has been tested at the experimental centre of the Building Technics Institute.

CHORAZY, W.

From the Katowice Branch of the Polish Pharmaceutical Society.
Farmacja Pol 20 no.1/2:57-60 25 Ja'64.

CHORAZY, Wieslaw

Certain derivatives of urea and their action on involuntary muscles. *Farmacja Pol* 20 no.9/10:330-31 25 My '64.

1. Institute of Pharmacology, Silesian School of Medicine, Zabrze. Head: doc. dr med. T. Chrusciel.

JASLAR, Z., mgr; CHORAZY, W.

From the Katowice Branch of the Polish Pharmaceutical
Society. *Pharmacja Pol* 20 no.9/10:382-383-25 M 164.

CHORAZYNA, HANNA

Znaczenia nauki Pawlowa dla hodowli zwierzat. (Wyd. 1.) Warszawa, Panstwowe
Wydawn. Rolnicze i Lesne, 1956. 40 p. (The importance of Pavlov's theory
for animal breeding. 1st ed.)
DA Not in DLC

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

CHORAZYNA, H.

Certain peculiarities of conditioned inhibition. Acta physiol. polon.
8 no.3:296-297 1957.

1. Z Zakładu Neurofizjologii Instytutu Biol. Dosw. im. M. Nenckiego w
Warszawie. Kierownik: prof. dr J. Konorski.
(REFLEX, CONDITIONED,
inhib. (Pol))

CHORAŻYNA, H.; STEPIEN, L.

Effect of removal of various segments of the auditory analyzer
on fresh memory of auditory stimuli in dogs, Acta physiol.polon.
11 no.5/6:672-674 '60.

1. Z Zakładu Neurofizjologii Inst.Biol.Dosw.im.Menckiego w
Warszawie Kierownik: prof.dr J.Konorski,

(HEARING physiol)
(MEMORY)

CHORAZYNA, H.; STEPIEN, L.

Impairment of auditory recent memory produced by cortical lesions
in dogs. Acta biol exper 21:177-187 '61.

1. Department of Neurophysiology, Nencki Institute of Experimental
Biology, Warsaw.

(DOGS) (BRAIN)

CHORAZYNA, H.; STEPIEN, L.

Impairment of recent memory of the auditory stimuli after bilateral ablations of sylvian gyri in dogs. *Bul Ac Pol biol* 9 no.3:117-120 '61.
(EEAI 10:9/10)

1. Department of Neurophysiology, M. Nencki Institute of Experimental Biology, Polish Academy of Sciences. Presented by J. Konorski.

(DOGS) (HEARING) (REFLEXES) (BRAIN)

CHORAZYNA, Hanna

Some properties of conditioned inhibition. Acta biol. exp. 22 no.1:
5-13 '62.

1. Department of Neurophysiology, The Nencki Institute of Experimental
Biology, Warsaw.

(REFLEX CONDITIONED)

CHORAZYNA, H.; KONORSKI, J.

Absolute versus relative cues in differentiation of tones in dogs.
Acta biol. exp. 22 no.2:11-21 '62.

1. Department of Neurophysiology, The Nencki Institute of Experimental
Biology Warsaw, Poland.
(HEARING physiology)

POLAND

CHORAZNYNA, H. and L. STEPIEN; Department of Neurophysiology (Zaklad Neurofizjologii), M. Nencki Institute of Experimental Biology (Instytut Biologii Doświadczalnej im. M. Nenckiego), PAN /Polska Akademia Nauk -- Polish Academy of Sciences/.

"Effect of Bilateral Sylvian Gyrus Ablations on Auditory Conditionings in Dogs"

Warsaw, Bulletin de l'Academie Polonaise des Sciences: Serie des Sciences Biologiques, Vol 11, No 1, 1963, pp 43-45.

Abstract: [English article] Auditory dysfunction after bilateral removal of the insular-temporal cortex in dogs is analyzed. The experimental procedures, establishment of conditioned reflexes and surgery are described. Results are discussed. 2 diagrams; 6 references, mostly Eastern.

1/1

KALINENKO, I.G., kand.biologicheskikh nauk; CHORBA, L.N.; GORYACHEV, N.P.

Strong winter wheats in Rostov Province. Zemledelie 24 no.8:38-41
Ag '62. (MIRA 15:9)

1. Zernogradskaya gosudarstvennaya selektsionnaya stantsiya
Donskogo nauchno-issledovatel'skogo instituta sel'skogo khozyaystva.
(Rostov Province—Wheat—Varieties)

KALINENKO, I.G., kand.biolog.nauk; CHORBA, L.N.

Harvesting time and the quality of strong wheats. Zemledelie 25 no.7:39-41
Jl '63. (MIRA 16:9)

(Caucasus, Northern--Wheat--Harvesting)

KALINENKO, I.G., kand. biolog. nauk; CHORBA, L.N.

Producing high-grade grain of strong winter wheat and its breeding
for quality. Agrobiologia 5:774-784 S-0 '64. (MIRA 17:11)

1. Zernogradskaya gosudarstvennaya selektsionnaya stantsiya.

PETROV, G.; GEORGIEV, Sl.; ILIEVA, V.; BUNDZHULOV, V.; STOICHEV, L.;
KODZHANSKA, N.; MATJNOV, N.; CHORBADZHIEV, D.; STOIANOV, St.;
STOEV, G.; STAMATOV, G.

Graphic method for the computation of cylindrical vessels under
external and internal pressure. Godishnik mash elekt 10 no.1:81-
93 '61 (publ. '62).

CHORBADZHIYEV, D.P. (Sefiya)

Use of nomographic methods in solving a quasi-linear partial equation.
Nom. sbor. no.3:52-68 '65.

Nomographic method of determining errors in the projective transformation of rectilinear scales. Ibid.:69-75

(MIRA 18:10)

CHORDASH, L.

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000509010011-4"

AUTHORS: Laslo Chordash and D'yerd' Mentsel' 70-3-3-25/36

TITLE: Determination of the Dimensions of the Elementary Cell of the Space Group of the Hydrate of Potassium Thiosulphate $K_2S_2O_3 \cdot 1/3 H_2O$ (Opredeleniye razmerov elementarnoy yacheyki prostranstvennoy gruppy $1/3$ gidrata tiosul'fata kaliya $K_2S_2O_3 \cdot 1/3 H_2O$)

PERIODICAL: Kristallografiya, 1958, Vol 3, Nr 3, pp 372 - 373 (USSR)

ABSTRACT: From Weissenberg photographs the dimensions of the unit cell of $K_2S_2O_3 \cdot 1/3 H_2O$ were found to be $a = 9.389 \pm 0.004 \text{ \AA}$, $b = 6.00 \pm 0.03$ and $c = 30.98 \pm 0.02$ and $\beta = 98^{\circ}22' \pm 03'$. The space group was found to be $P2_1/c$, $d_{obs.} = 2.262 \pm 0.002$ and $Z = 12$. Powder photographs showed weak lines not in the ASTM index. There are 4 references, 2 of which are German, 1 English and 1 French.

ASSOCIATION: Institut eksperimental'noy fiziki Budapeshtskogo universiteta im. Loranda Etvesh (Institute of Experimental Physics, Lorand Eötvös University, Budapest)

SUBMITTED: February 10, 1957.

Card 1/1

CHORESKU, F. [Chorescu, F.], prof.

In the Rumanian Atomic Physics Institute. IUn. tekhn. 4 no.9:46-47
S '59. (MIRA 12:12)

1. Zamestitel' direktora Instituta atomnoy fiziki AN Rumynskoy
Narodnoy Respubliki.
(Rumania--Atomic energy research)

KOVARSKIY, A.Ye., red.; YAROSHENKO, M.F., red.; GEYDEMAN, T.S., red.; DIKUSAR, I.G., red.; DOROKHOV, L.M., red.; ZUBKOV, A.A., red.; PELYAKH, M.A., red.; FURDUY, F.I., red.; CHEBOTAR', A.A., red.; CHORIK, F.P., red.; BOLYIEVA, L., red.

[Transactions of the Third Conference of Young Moldavian Scientists] Trudy III nauchnoi konferentsii molodykh uchenykh Moldavii. Kishinev, Kartia moldoveniaske. No.2.[Biological and agricultural sciences] Biologicheskie i sel'skokhoziaistvennye nauki. 1964. 273 p. (MIRA 17:8)

1. Nauchnaya konferentsiya molodykh uchenykh Moldavii, 3d.

GUZHIN, G.S.; OROZALIYEV, S.; OTORBAYEV, K.; UMURZAKOV, S.; CHORMONOV, B.

Mikhail Mikhailovich Kartavov; on his 50th birthday. Izv. Kir. fil.
Geog. ob-va SSSR no.4#97-98/ '63. (MIRA 16:12)

CHORMONOV, B.Sh.

Formation of the production complex of the Frunze industrial center.
Izv. AN Kir. SSR, Ser. est. i tekhn. nauk 4 no.4:47-56 '62.

(Frunze region—Industries)

(MIRA 16:4)

CHORMONOV, Bakas Sharshembiyevich; SIDOROV, Aleksandr Fedorovich

[Industrial progress in the Kirghiz S.S.R.] Promyshlennyi
progress v Kirgizskoi SSR. Frunze, Kirgizskoe gos. izd-vo
1963. 227 p. (MIRA 17:4)

CA

2

Effect of purification on the piezoelectric properties of Seignette salt crystals. V. P. Konstantinova and T. Kh. Chormonay (P. N. Lebedev Phys. Inst. Acad. Sci. U.S.S.R., Moscow). *Doklady Akad. Nauk S.S.S.R.* 73, 11-14 (1961).—Passage of a.c. through crystals of $\text{NaKC}_2\text{H}_3\text{O}_6 \cdot 4\text{H}_2\text{O}$, for 15 and 49 hrs., with 100-200 v./cm., resulted in considerable lowering of the max. of the dielec. const. ϵ . The same effect was observed on crystals grown from salt purified by 4 consecutive recrystallizations; passage of an elec. current through the crystals produced further lowering of ϵ . Purification by recrystallization and by the elec. current also lowers the piezoelec. modulus d_{31} at the Curie point (24.5°) from 260×10^{-11} to 40×10^{-11} e.s.u., and the elec. cond. along the o axis at 20° from 2.3×10^{-12} to 0.82×10^{-12} ohm $^{-1}$ cm $^{-1}$. The Curie point is shifted to higher temps. by $1-1.5^\circ$.
N. Thon

Inst. Cryst., AS USSR

1757

CHERMONOV, T. Kh.

Chemical Abst.
Vol. 48 No. 6
Mar. 25, 1954
General and Physical Chemistry

2
The nature of piezoelectricity of Rochelle salt. T. Kh. Chermouov. *Izvest. Akad. Nauk Kazakh. S.S.R. No. 104, Ser. Astron. i Fiz. No. 5, 100-15 (1951)*.—Static and dynamic examn. of the piezoelec. properties of Rochelle salt crystals showed the following: Ordinary Rochelle salt purified by an elec. current is gradually freed of impurities and the max. of its dielec. permeability at the Curie point is lowered proportionally to the time of current passage through the specimen, although it does not vanish completely. The purified specimens show a displacement of the upper Curie point by 1-1.5° toward higher temp. The piezoelec. properties may depend on the presence of other impurities the nature of which remains unknown.
G. M. Kosolapoff

CHORMONOV, T.Kh., kand.fiziko-matematicheskikh nauk; GALIMZHANOV, R.Sh.

Growing seignette salt crystals with admixtures and investigating
some of their physical properties. Spis.nauch.trud,KazGMI no.14:
100-106 '56. (MIRA 10:10)
(Potassium sodium tartrate) (Crystals)

CHORANDOV, I. KN

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000509010011-4

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000509010011-4"

SOV/137-57-6-10823

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 6, p 202 (USSR)

AUTHOR: Chormonov, T.Kh.

TITLE: X-ray Investigation of Types II and III Residual Stresses in Nr 2Kh13 Steel (Rentgenograficheskoye issledovaniye ostatochnykh napryazheniy II i III roda stali 2Kh13)

PERIODICAL: Sb. nauch. tr. Kazakhsk. gorno-metallurg. in-t, 1956, Nr 13, pp 380-388

ABSTRACT: A study is made of the relation between the values of residual stresses (RS) and conditions of machining. Specimens in the form of plates measuring 10x20x8 mm are cut from cylindrical blanks and electropolished. X-ray photography is done with a BSV tube with cobalt anticathode. A collimating system with two 0.8-mm diaphragms is used to produce the parallel X-ray beam. It is found that as machining speed of Nr 2Kh13 steel rises in the interval from 220 to 660 m/min, the value of type II residual stresses declines, all other conditions being equal. Low machining speeds are accompanied by a sharp rise in type III RS. The depth of penetration of types II and III RS declines as machining speed is increased from

Card 1/2

X-ray Investigation of Types II and III Residual Stresses in Nr 2Kh13 Steel

SOV/137-57-6-10823

220 to 660 m/min. A doubling of feed speed causes the depth of work hardening to rise by about 30-40%. It is pointed out that the characteristic thermal work-softening of deformed metal in high-speed machining results in partial stress relief.

Yu.L.

Card 2/2

CHORMONOV, T. K.

Category : USSR/Solid State Physics - Structure of Deformable Materials E-8

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6735

Author : Chormonov, T. Kh.

Title : X-ray Diffraction Investigation of the Surface Quality of Metals Worked by High Speed Cutting.

Orig Pub : Izv. AN SSSR, ser. fiz., 1956, 20, No 6, 705-705

Abstract : No abstract

Card : 1/1

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000509010011-4

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000509010011-4"

СЕРИОЗНОЕ И. А. А.

Category: USSR / Physical Chemistry - Crystals

B-5

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29762

Author : Chormonov T. Kh., Galimzhanov R. Sh.

Inst : Kazakh Mining and Metallurgical Institute

Title : Growing of Rochelle Salt Crystals with Admixtures and Investigation of Some of Their Physical Properties.

Orig Pub: Sb. nauch. tr. Kazakhsk. gorno-metallurg. in-t, 1956, No 14, 100-106

Abstract: Description of a method of growing crystals of Rochelle salt with admixtures and of the study of the effects of admixtures of KAl(SO₄)₂, CuSO₄, SrCl₂, RbCl and LiCl on the external shape of the crystals, their dielectric constant and piezoelectric modulus.

Card : 1/1

-42-

Category: USSR / Physical Chemistry - Crystals

B-5

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 29750

dyestuff. With high concentrations of the dyestuff its filtering action, and also the alteration of its aggregation state, distort the spectral distribution of PE. Analogous results were obtained with TlI. In AgBr and TlBr the PE is not sensitized by the dyestuffs. Adsorption of I_2 vapor at stained and unstained AgI and TlI results in a considerable increase of the natural as well as of the sensitized photoconductivity. The following mechanism of sensitizing is proposed: The iodine adsorbed at AgI and TlI provides acceptor surface levels. Increase in photoconductivity occurs on liberation of electrons from these levels by the energy absorbed by the molecules of the dyestuff and transmitted into the crystal (semiconductor).

Card : 2/2

-41-

30 (7)

SOV/31-59-8-11/17

AUTHOR: Chormonov, T. Kh., Candidate of Physical and Mathematical Sciences, ~~Delegated~~

TITLE: The International Fedorov Session in Crystallography

PERIODICAL: Vestnik Akademii nauk Kazakhskoy SSR, 1959, Nr 8, pp 86 - 87 (US3R)

ABSTRACT: From 21 to 27 May 1959 the International Fedorov Session in Crystallography was held at Leningrad. It was convened by the International Union of Crystallographers, the Natsional'nyy komitet sovetskikh kristallografov (National Committee of Soviet Crystallographers), the Institut kristallografii AN SSSR (Institute of Crystallography, AS USSR) and the Leningradskiy ordena Lenina i ordena Trudovogo Krasnogo znameni Gornyy institut (Leningrad Mining Institute of the Order of Lenin and the Order of the Red Banner of Labor). The work of the session was concentrated on two symposia: 1) crystal chemistry analysis and crystal chemistry; 2) electronic diffraction. More than 500 scientists from 15 countries (USSR, China, Czechoslovakia, India, France, Great Britain, USA, ✓

Card 1/3

The International Fedorov Session in Crystallography

SOV/31-59-8-11/17

Netherlands, Australia, Norway, Switzerland, Canada, Germany, Japan and Brazil) participated. In the plenary session 20 very interesting reports were heard, characterizing the most important trends in crystallography, crystal chemistry, roentgenography and electronography during the last 3 years. The session heard the following Soviet reports: Academician N. V. Belov on "In memoriam of Ye. S. Fedorov" and "The Second Chapter of Crystal Chemistry of Silicates"; B. N. Delone on "The Theory of Reduction"; I. I. Shafranovskiy on "The Further Ways of Development of Crystal Chemistry Analysis"; A. I. Kitaygorodskiy on "Tensions and Conformations of Organic Molecules"; B. K. Vaynshteyn on "Some Problems Concerning the Theory of Structure Analysis of Crystals"; Z. G. Pinsker on "Some Crystal Chemistry Problems of Induction Phases"; Academician A. V. Shubnikov, Director of the Institute of Crystallography AS USSR, on "The Formation of Crystals". The author, a delegate of the International Fedorov Session, reports that during the last three years, achievements were made in the new crystallographic branches dealing with the investigation of the structure of viruses, antibiotics, ✓

Card 2/3

The International Fedorov Session in Crystallography

SOV/31-59-8-11/17

vitamins and albumens. Besides, he mentions Soviet Professors G. S. Zhdanov, V. I. Iveronova, Yu. S. Terminasov, G. B. Bokiya and S. Ya. Umanskiy. The session cordially welcomed Shubnikov's colored motion picture "Obrazovaniye kristallov" (The Formation of Crystals).

Card 3/3

ACCESSION NR: AR3010528

5/0058/63/000/009/E039/E039

SOURCE: RZh. Fizika, Abs. 9E303

AUTHOR: Chormonov, T. Kh.

TITLE: Growth of single crystals and acceleration of the process of spontaneous crystallization in an ultrasonic field

CITED SOURCE: Sb. nauchn. tr. Kazakhsk. politekhn. in-t, no. 21, 1960, 271-283

TOPIC TAGS: crystal growth, single crystals, ultrasonic field, acceleration of growth, Rochelle salt, potassium aluminum alum, super-cooling

TRANSLATION: The crystallization of Rochelle salt and potassium aluminum alum from aqueous solutions by evaporation of the solvent was investigated. The motions of the seed and of the concentrator of ultrasonic oscillations (21.5 kcs) were synchronized in such a

Card 1/2

ACCESSION NR: AR3010528

way that the face of the growing crystal was always in a standing-wave node. It is shown that ultrasonic oscillations of low intensity contribute to crystal growth. With increasing intensity, the dissolution of the crystals begins to predominate. Other conditions being equal, ultrasound accelerates the spontaneous crystallization in the supercooling region. G. Rogov.

DATE ACQ: 14Oct63

ENCL: 00

SUB CODE: PH

Card 2/2

85875

24.7500 (1035, 1043)

S/048/60/024/011/011/036
B006/B056

9.2181 (2303, 3203)

AUTHOR: Chormonov, T. Kh.

TITLE: The Influence Exerted by Ultrasonics on Some Physical
Properties of Rochelle Salt Crystals

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960,
Vol. 24, No. 11, pp. 1347 - 1349

TEXT: The present paper is a reproduction of a lecture delivered on the
3rd Conference on Ferroelectricity, which took place in Moscow from
January 25 to 30, 1960. The physical properties of Rochelle salt and
many other ferroelectrics change considerably under the action of external
fields even if these are weak. The present paper contains a report con-
cerning investigations of the action of ultrasonic fields upon the phy-
sical properties. The crystals were grown in special thermostatically
controlled ($\pm 0.05^{\circ}\text{C}$) crystallizers, and were exposed to ultrasonic irra-
diation during growth; this was done by means of magnetostriction trans-
formers at 21.5 kc/sec and a specific output of $2\text{w}/\text{cm}^2$. The higher the
ultrasonic intensity, the worse was the homogeneity of the crystals;

Card 1/3

The Influence Exerted by Ultrasonics on Some ⁸⁵⁸⁷⁵ S/048/60/024/011/011/036
Physical Properties of Rochelle Salt Crystals B006/B056

thus, the crystals were exposed to only low sound intensities in the course of a very slow growth. Next, the microhardness was measured by means of a device of the type ПМТ-3 (PMT-3) at loads of 20-200 g. The microhardness of the crystals exposed to ultrasonic irradiation amounted to an average of 77 kg/mm², while those of crystals not exposed to ultrasonic irradiation were 58 kg/mm². ϵ and $\tan \delta$ were measured by means of an electrometer of the type CP-1M (SG-1M) and a Q-meter of the type KB-1 (KV-1). The results obtained are shown in Figs. 1 and 2. Finally, the influence exerted by ultrasonic irradiation upon the shape and intensity of the interference lines (X-cut) of the crystals was investigated. It was found that as a result of ultrasonic irradiation a broadening of the lines with simultaneous intensity decrease occurs. There are 3 figures.

ASSOCIATION: Kazakhskiy politekhnicheskiy institut (Kazakh Polytechnic Institute)

Card 2/3

85375

S/048/60/024/011/011/036
B006/B056

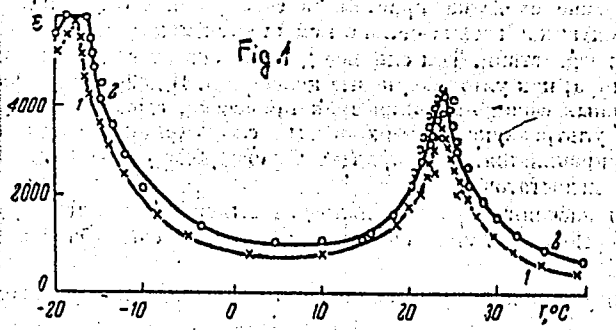
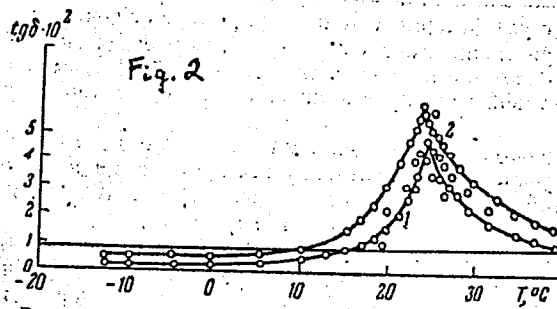


Fig. 1

Legend to Figs. 1 and 2:
The curves 1 were recorded on a
crystal exposed to ultrasonic
irradiation, and the curves 2 on
an unexposed crystal.



Card 3/3

L 16855-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD

ACCESSION NR: AR3006319

S/0056/63/000/007/E085/E085

SOURCE: RZh. Fizika, Abs. 7E551

54

AUTHOR: Chormonov, T. Kh.

TITLE: Investigation of the structure and microhardness of metals subjected to the action of ultrasound. /6

16

CITED SOURCE: Sb. nauchn. tr. Kazakhsk. politekhn. in-t, no. 21, 1960, 170-178

TOPIC TAGS: ultrasonics, metal treatment, microhardness, fine structure, aluminum, copper

TRANSLATION: An investigation was made of the influence of ultrasound on the fine structure and microhardness of Al and Cu. The specimens were annealed at 300 and 500°C, polished electrolytically, and subjected to the action of ultrasonic oscillations with frequency

Card 1/2

L 16855-63

ACCESSION NR: AR3006319

21.5 kcs and specific power 2 W/cm. After "sounding" the microhardness increased (by approximately 200 per cent) and the width of the smearing out of the x-ray interference lines increased; the intensity of the latter decreased. These effects are due to the crumbling of the block structure during the course of application of the ultrasound. M. Usikov.

DATE ACQ: 15Aug63

SUB CODE: PH

ENCL: 00

Card 2/2

L 19302-63 EWP(k)/EWP(m)/EWP(q)/BDS ASD/APFTC PF-1, JD
ACCESSION NR: AR3006907 S/0137/63/000/007/1061/1061

SOURCE: RZh. Metallurgiya, Abs. 71413

AUTHOR: Chormonov, T. Kh.

TITLE: Investigation of the structure and microhardness of metals subjects to ultrasound

CITED SOURCE: Sb. nauchn. tr. Kazakhsk. politekhn. in-t, no. 21, 1960, 170-178

TOPIC TAGS: structure, microhardness, aluminum, copper, strength, ultrasound

TRANSLATION: The investigation was conducted on Al and electrolytic Cu. Samples 10 x 10 x 0.15 mm and cylindrical samples 2 mm in diam. and 30 mm long were annealed at 300 and 500C for 2 hrs to remove stresses. After electropolishing, the samples were subjected to ultrasound treatment for 1-4 hrs. As a result of the ultrasound treatment, the microhardness of Al and Cu is increased from 26 and 60 to 37 and 125 kg/mm², respectively, for samples annealed at 300C. The increase in the hardness is related to a reduction of the dimensions of the mosaic blocks acted upon by ultrasound. X-ray diffraction studies of the change

Card 1/2

L 19302-63

ACCESSION NR: AR3006907

in the line width and intensity confirm the hypothesis of pulverization of the mosaic blocks during ultrasound treatment. It is proposed that ultrasound treatment be used to increase the surface strength of metals. P. Novik.

DATE ACQ: 12Aug63

SUB CODE: ML

16
ENCL: 00

Card 2/2

CHORMONOV, Talgat Khasanovich; SKALKOVSKIY, L., red.

[Ultrasound and its application in science and technology]
Ul'trazvuk i ego primeneniye v nauke i tekhnike. Alma-Ata,
Izd-vo "Kazakhstan," 1964. 57 p. (MIRA 18:3)

L 47400-66 EWI(m)/EWP(k)/T/EWP(w)/EWP(t)/EII IJP(c) JH/JD/HW/WB
ACC NR: AR6025799 SOURCE CODE: UR/0058/66/000/004/H083/H083

AUTHOR: Chormonov, T. Kh.

TITLE: Cavitation and its influence on physical characteristics of aluminum 27

SOURCE: Ref. zh. Fizika, Abs. 4Zh566

REF SOURCE: Tr. Kazakhsk. politekhn. in-ta, sb. 25, 1965, 44-53 70 B

TOPIC TAGS: aluminum, cavitation, ultrasonic property, microhardening, x ray diffraction study

ABSTRACT: The authors investigate the influence of ultrasonic cavitation on the physical characteristics of aluminum. Experimental data are presented on the linear dependence of the losses in weight of aluminum foil, due to cavitation erosion, on the time of sounding. It is shown that with increasing duration of the action of the ultrasound in the presence of cavitation, an increase takes place in the microhardness of aluminum. An x-ray diffraction investigation of the fine structure of aluminum subjected to the influence of cavitation is described. It is shown that a noticeable increase in the width of blurring of the interference lines occurs under the influence of cavitation. This is attributed to the destruction of the blocks of the mosaic structure and microdistortions of the structure of aluminum. Bibliography, 13 titles. V. Akulichev. [Translation of abstract]

SUB CODE: 20

Card hs 1/1

L 47370-66 EWT(l)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/WB/JH

ACC NR: AR6028436

SOURCE CODE: UR/6137/66/000/005/1048/1048

58
57
B

AUTHOR: Chorramonov, T. Kh.

TITLE: Cavitation and its effect on the physical characteristics of aluminum

SOURCE: Ref. zh. Metallurgiya, Abs. 5I323

REF SOURCE: Tr. Kazakhsk. politekhn. in-ta, sb. 25, 1965, 44-53

TOPIC TAGS: cavitation, aluminum, aluminum foil, ultrasonic effect

ABSTRACT: The effect of ultrasonic cavitation on the physical characteristics of aluminum has been studied. Experimental facts were presented on the linear dependence of weight losses of aluminum foils caused by cavitation erosion from the time of exposure to ultrasound. It was shown that the microhardness of aluminum increases with an increase in the duration of the ultrasound. An x-ray analysis of a thin aluminum structure subjected to cavitation is described. It was shown that the effect of cavitation markedly increases the width of interference

Card 1/2

UDC: 539.375:669.71

L 47370-66

ACC NR: AR6028436

lines. This is explained by the destruction of blocks in the mosaic structure and
microdistortions in the aluminum structure. [Translation of abstract] [FM]

SUB CODE: 13, 20/

Card 2/2 afs

ACC NR: AP6032454 SOURCE CODE: UR/0129/66/000/009/0018/0020

AUTHOR: Pogodin-Alekseyev, G. I.; Chormonov, T. Kh. 15
B

ORG: Special Design-Technological Bureau (Osoboye konstruktorsko-tekhnologicheskoye byuro)

TITLE: Investigation of the effect of ultrasound on alloy properties

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 9, 1966, 18-20 and appropriate insert facing p. 49

TOPIC TAGS: ultrasonic vibration, molten metal, metal crystallization, hardness, babbitt metal, aluminum base alloy, zinc base alloy

ABSTRACT: The crystallization and structure formation in molten aluminum, zinc and B16 babbitt under the action of ultrasonic vibrations at an intensity of 15.6—39.8 w/cm² for 20—60 sec have been investigated. It was found that ultrasonic vibration accelerated crystallization of the melts and greatly increased the number of crystallization centers. The latter brought about metal grain fragmentation and consequent improvement in the strength and hardness of metals. For example, the microhardness of aluminum increased from 26.7 to 53.0 after a 20-sec

Card 1/2

UDC: 669.065.5:620.17:621.789

L 08291-67
ACC NR: AP6032454

treatment with ultrasound at an intensity of 15.6 w/cm². The micro-hardness of zinc increased from 32.4 to 55.7 after 60-sec treatment with ultrasound at an intensity of 39.8 w/cm². The tensile strength of zinc increased from 7.4 to 9.3 kg/mm² after treatment with ultrasound for 30 sec at an intensity of 18.0 w/cm². The maximum fragmentation of metal grains occurred with ultrasonic vibrations at an intensity of 40 w/cm² and a frequency of 22.5 kc. Analogous structure changes and higher mechanical properties were observed in B16 babbitt after ultrasonic treatment. Orig. art. has: 1 figure and 1 table.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 008/

Card 2/2 LS

Chorna, T.T.

CHORNA, T.T.

Comparative evaluation of the data of agglutination reaction in typhoid fever patients using Widal's method and its modification by Levkovich. Mikrobiol.zhur. 19 no.4:62-64 '57. (MIRA 11:1)

1. Z kafedri infektsiynikh khvorob Kiivs'kogo medichnogo institutu im. O.O.Bogomol'tsya.
(TYPHOID FEVER--DIAGNOSIS--AGGLUTINATION REACTION)

CHORNAYA, N.S. [Chorna, N.S.]; TERLETSKIY, B.S. [Terlets'kyi, V.S.];
SMETANKINA, N.P.; KUZNETSOVA, V.P. [Kuznietsova, V.P.]

Mechanism underlying the conductivity of puropolysiloxanes.
Ukr.fiz.zhur. 10 no.10:1150-1152 O '65.

(MIRA 1961)

1. Institut poluprovodnikov AN UkrSSR i Institut khimii
polimerov AN UkrSSR, Kiyev. Submitted May 26, 1965.

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000509010011-4

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000509010011-4"

"APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000509010011-4

APPROVED FOR RELEASE: 06/12/2000

CIA-RDP86-00513R000509010011-4"

CHORNIY, P.P.

(3)

Nitrogen content of the blood of long-horned cattle of different ages. A. A. Rukhel'man and P. P. Chorniy (Odessa Agr. Inst.). *Ukrain. Biokhim. Zhur.* 25, 310-14 (in Russian, 314-16(1953).—Total blood N in the embryo increases steadily from the 4th to the 9th month; it is still higher in adults. The protein N increases in the embryonic and postnatal stages, and drops in 10-15-year olds. Globulin N increases in all periods more rapidly than protein N.
B. Gutoff

*Kafedra Rozvedennya sil's'kokospodars'kykh
Tvarnyh*

VAYDANYCH, V.I. [Vaidanych, v.i.]; LYSKOVICH, A.B.; [Lyskovych, O.B.]
CHORNIY, Z.P.

Effect of thermal treatment on the spectrometric properties of
NaI(Tl) phosphors. Ukr. fiz. zhur. 6 no.5:714-716 S-O '61.
(MIRA 14:11)

1. L'vovskiy gosudarstvennyy universitet im. Iv.Franko.
(Phosphors)
(Spectrometry)

42767
S/185/62/007/010/009/020
D234/D308

24,3500
AUTHORS:

Vyshnevs'kyy, V. N., Lyskovych, O. B., Pidzyraylo, M.S.
and Chornyy, Z. P.

TITLE:

Investigation of x ray luminescence of scintillators
NaI (Tl)

PERIODICAL:

Ukrayins'kyy fizychnyy zhurnal, v. 7, no. 10, 1962,
1101-1104

TEXT: Single crystals of NaI(Tl), 2 - 3 cm thick and having a cross-section area of 2 cm², were investigated. The energy distribution graph shows a broad intense band with a maximum near 420 mu and a less intense one near 330 mu. If the activator concentration is smaller than 2.5 x 10⁻⁴ moles Tl/mole NaI the total intensity of luminescence is proportional to it. Continuous irradiation for 17 hours decreased the luminescence intensity, which did not return to usual value after 30 hours. The authors explain this by additional scattering of the excitation energy on lattice defects caused irreversibly by irradiation. The authors thank Ya. M. Zakharko for

Card 1/2 SEE S/185/62/007/010/013/020

Investigation of x ray ...

S/185/62/007/010/009/020
D234/D308

discussion. There are 3 figures.

ASSOCIATION: L'vivs'kyy derzhuniversytet im. Iv. Franka (L'viv
State University im. Iv. Franko) *f*

SUBMITTED: March 13, 1962

Card 2/2

S/185/62/007/012/006/021
D234/D308

AUTHORS:

Vyshnevs'kyy, V.N., Lyskovych, O.B.,
Pidzyraylo, M.S. and Chorniy, Z.P.

TITLE:

Investigation of the dependence of
x ray luminescence of NaI (T1) crystals
on temperature and activator content

PERIODICAL:

Ukrayins'kyy fizychnyy zhurnal, v. 7,
no. 12, 1962, 1292 - 1296

TEXT:

The activator content was 1×10^{-6} ,
 1.5×10^{-5} , 8×10^{-5} , 1.6×10^{-4} moles T1/mole NaI and 2%
T1I by weight in the melt. At 2700K there are two lumines-
cence bands, with maxima near 302 mp. With decreasing tem-
perature the first maximum is displaced towards the shorter
wavelengths. With 2% T1 only the second band is observed.
The dependence of the integral energy on temperature varies
with T1 concentration. The latter is attributed to the pre-
sence of luminescence centers in the case of large T1 content,
Card 1/2

VISHNEVSKIY, V.N. [Vyshnevs'kyi, V.N.]; LYSKOVICH, A.B. [Lyskovych, O.B.];
PIDZYRAYLO, N.S. [Pidzyrailo, M.S.]; CHORNIY, Z.P. [Chornii, Z.P.]

Roentgenluminescence of NaI(Tl) crystal phosphors. Ukr. fiz.
zhur. 7 no.10:1101-1105 0 '62. (MIRA 16:1)

1. L'vovskiy gosudarstvennyy universitet im. Iv.Franko.
(Phosphors)

VISHNEVSKIY, V.N. [Vyshnevs'kyi, V.N.]; LYSKOVICH, A.B. [Lyskovych, O.B.];
PIDZYRAYLO, N.S. [Pidzyrailo, M.S.]; CHORNIY, Z.P. [Chornii, Z.P.]

Dependence of the roentgenoluminescence of NaI-Tl crystals on the
temperature and activator content. Ukr. Fiz. zhur. 7 no.12:1292-1297
D '62. (MIRA 15:12)

1. L'vovskiy gosudarstvennyy universitet im. Iv.Franko.
(X-ray spectroscopy) (Sodium iodide crystals) (Luminescence)

GG/GS/SD

SECRET-2/EWA(c)/EWT(1)/EWT(a)/T/EWP(b)/EWP(t)

B: 4

ACQUISITION NO: AT500067

SECRET

Vaydenich, V. I. (Vaydenich, V. I.); Lytkov, V. I.;
Belikovych, B. G. (Belikovych, B. G.)

... dependence of microhardness on the load in sodium and
single crystals

Author: Lvov. Universytet. Pytannya fizyky tverdykh tel
Lvov. Vyd-vo Lvivskoyi univ.

... sodium iodide, single crystals, microhardness,
load dependence, concentration intervals

The purpose of the investigation was to determine the influence of acti-
vators on the microhardness of sodium and cesium iodide single crys-
tals by the Kiropolous method, and tests were made of the microhardness
of the applied load and of the activation energy of the
concentration intervals of the
sodium iodide, cesium iodide, single crystals, microhardness, load dependence, concentration intervals

15039-65

ADMISSION NR: AT5009627

was measured with PMT-3 instrument. The results have shown that single crys-

table.

None

22Jun64

ENCL: 01

SUB CODE: SS, CP

004

OTHER: 000

Card 2/3

E 02192-67 EWT(1)/EWT(m)/T/EWP(t)/ETI IJP(c) JD/JG/GG

ACC NR: AR6031870

SOURCE CODE: UR/0058/66/000/006/D085/D085

AUTHOR: Vaydanych, V. I.; Huseva, N. K.; Triska, T. Y.; Chorniy, Z. P.

TITLE: Effect of methods of growing alkaline iodide crystals on their luminescence properties *2* *27* *27* *27* *46*

SOURCE: Ref. zh. Fizika, Abs. 6D695 *B*

REF SOURCE: Visnyk L'vivs'k. un-tu. Ser. fiz., no. 2, 1965, 46-48

TOPIC TAGS: crystal, crystal growth, anion impurity, iodide, iodide crystal, photo luminescence, x ray luminescence, crystal impurity, energy transmission

ABSTRACT: The effect of various anion impurities formed in a crystal during its growth (using the Kiropoulos and Stokbarger methods of growing crystals in an inert gas atmosphere), on the luminescence properties of phosphors NaJ-Tl, KJ-Tl, and CsJ-Tl is shown. A decrease in the output of photo and x-ray luminescence in crystals with anion impurities is explained by the assumption that the transmission of energy by Tl luminescence centers, both in the electron-hole and exciton excitation mechanism, takes place at a higher energy level (D-band, P₁-transition). [Translation of abstract] [SP]

SUB CODE: 20/

Card 1/1 *egk*

L 13915-65 EWP(t)/EWA(h)/EWT(l)/EWT(m)/T/EWP(b)/EPA(s)-2 Pt-7/Pa-7/FeB IJP(e)
AT/SD/SS

ACCESSION NR: AP5009517

S/0048/65/029/003/0423/0426

AUTHOR: Lyskovich, A.B.; Chorniy, Z.P.; Guseva, N.K. 47

TITLE: Investigation of the roentgenoluminescence and thermoluminescence of
activated sodium iodide crystal phosphors (Report, 12th Conference on
Luminescence held in L'vov, 30 Jan-5 Feb 1964)

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 29, no. 3, 1965, 423-426

TOPIC TAGS: luminescence, luminescent crystal, sodium compound, iodine compound,
thermoluminescence, x ray

ABSTRACT: This paper reports the results of a continuation of earlier work on the
roentgenoluminescence of NaI:Tl, undertaken because of the technical importance of
the material as a scintillation detector for soft x-rays. The present work concerns
NaI crystals with a high (> 2 mole %) thallium content. Roentgenoluminescence
spectra excited by 40 keV x-rays were recorded at temperatures from 100 to 650°K
(11 of these spectra are presented graphically), glow curves were recorded, and the
spectral composition of the low temperature thermostimulated emission was examined.
The results are presented graphically and are discussed at some length. In addi-

Card 1/3

L 43915-65

ACCESSION NR: AP5009517

0

tion to the principal roentgenoluminescence emission band near 420 m μ , a weak band was clearly observable at 330 m μ even at the lowest temperature. This band increased in intensity with increasing temperature up to 450 $^{\circ}$ K, and decreased in intensity with further increase of temperature. The peak of the principal emission band shifted toward the shorter wavelengths with increasing temperature, from about 430 m μ at 100 $^{\circ}$ K to 400 m μ at 520 $^{\circ}$ K. The roentgenoluminescence yield decreased rapidly with decreasing temperature in the region from 150 to 100 $^{\circ}$ K; this is ascribed to self-trapping of holes. The yield decreased with increasing temperature above 400 $^{\circ}$ K, owing to thermoquenching. Five peaks were observed in the glow curve; these occurred at 120, 140, 160, 220, and 295 $^{\circ}$ K. Only radiation of the thallium luminescence band with a peak at 420 m μ contributed to the two lowest temperature peaks of the glow curve. Of the three low temperature glow curve peaks, only one appeared in crystals grown in an inert gas atmosphere. From the effect of low temperature x-ray irradiation on the behavior of the 295 $^{\circ}$ K glow curve peak it is concluded that the trapping centers that are responsible for this radiation, and thus adversely affect the scintillation properties of the phosphor, may be due to radiation (and other) damage to the crystal. Orig. art. has: 5 figures.

Card 2/3, Submitted 00

L 0299-66 EWT(1)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD

ACC NR: AP5028922

SOURCE CODE: UR/0185/65/010/011/1215/1221

AUTHOR: ^{44, 55} Byelikovich, B. O. -- ^{44, 55} Belikovich, B. A.; ^{44, 55} Lyskovych, O. B. -- ^{44, 55} Lyskovich, A. B.; ^{44, 55} Chorniy, Z. P. -- Chorniy, Z. P.

ORG: ^{44, 55} L'vov State University im. I. Frank (L'vivs'kyi derzhuniversytet)

74
B3

TITLE: Investigation of energy migration in CsI and CsI(Tl) crystals

SOURCE: ^{44, 55} Ukrayins'kyi fizychnyy zhurnal, v. 10, no. 11, 1965, 1215-1221

TOPIC TAGS: ^{44, 55} luminescence, ^{44, 55} luminescence spectrum, luminescent crystal, activated crystal, crystal defect, crystal lattice vacancy, ^{44, 55} X ray emission, free electron, EPR, ^{44, 55} energy theory

ABSTRACT: An investigation was made of the dependence of the spectral composition and the yield of x-ray luminescence of pure CsI crystals and crystals activated with TlI, NaI, and KI on temperature in the range from 100 to 300K. In nonactivated CsI crystals at room temperature, two luminescence bands were observed at 320 and 420 nm; at low temperature, new luminescence bands appeared at 327 and 347 nm. In CsI crystals activated with NaI, the intensity of the 420 nm band increased by several orders. The spectral composition of the x-ray luminescence changed, depending on the thallium concentration in CsI crystals. In CsI crystals without thallium impurities, the luminescence with maxima at 320 and 420 nm were of the same nature. This condition can be attributed to structural distortion of the crystal or distortion of the stoichiometry of the crystal. The decrease of the luminescence yield of the 320 and 420 nm bands

Card 1/2

2

L 8299-66

ACC NR: AP5028922

was due to the absorption of energy in the lattice by other low-temperature luminescence centers such as auto-localized holes. Recombination of a free electron with an auto-localized hole apparently produced the luminescence in the region of 347 nm. This interpretation does not contradict the generally accepted hypothesis that excitation of the 347 nm band has an exciton character, since at low temperatures excitons can disintegrate into free electrons and auto-localized holes. Investigations of electron paramagnetic resonance in alkali halide crystals showed that the thallium ion at low temperature can capture an electron and thus produce a quasi-atomic thallium. At low temperature the number of free holes decreased, due to auto-localization, and the yield of the luminescence decreased while the lattice luminescence in the 347 nm region increased. With the rise of the activator concentration the number of auto-localized holes sharply increased, causing a still larger decrease of activated luminescence. The luminescence in the region of 347 nm does not appear because of the small concentration of free electrons resulting from capture by the activator ions. Orig. art. has: 6 figures.

[JA]

SUB CODE: 20/ SUBM DATE: 15Dec64/ ORIG REF: 007/ OTH REF: 010/ ATD PRESS: 4149

CC
Card 2/2

| | | | |
|-------------------|---|---|-------|
| L 9913-66 | EWT(1)/EWT(m)/EWP(+)/EWP(-) | IJP(c) | JD/JG |
| ACC NR: AP5022871 | | SOURCE CODE: UR/0051/65/019/003/0446/0448 | |
| AUTHOR: | Chorniy, Z. P.; Lyskovich, A. B. | | |
| ORG: | None | | |
| TITLE: | The dependence of the spectral composition of <u>radioluminescence</u> on the intensity of the exciting radiation | | |
| SOURCE: | Optika i spektroskopiya, v. 19, no. 3, 1965, 446-448 | | |
| TOPIC TAGS: | radioluminescence, luminescence center, luminescence spectrum, scintillation, sodium compound, cesium compound, x ray irradiation | | |
| ABSTRACT: | In order to clarify the mechanism whereby excitation energy is transferred to luminescence centers, the authors investigated the spectral composition of the radioluminescence of NaI(Tl) and CsI(Tl) scintillators grown by a modified Kiroopoulos method. The melt was doped with 0.3--0.5 wt.% of thallium. The x ray excitation ranged from 5--1500 r/sec. The luminescence was measured with an SF-4 spectrophotometer provided with a photoelectric attachment and an FEU-18 photomultiplier. The study showed that the spectral distribution of the radioluminescence depends on the density of the x-ray excitation. With increasing x-ray intensity, the fraction of pure lattice emission in the total radioluminescence increases. In NaI(Tl) the fraction of pure lattice luminescence at low excitation density is 10% of the total radioluminescence of the crystal. At high excitation density it is 22%. The corresponding figures for CsI(Tl) crystals are 28% and 45%. The results are interpreted in | | |
| Card 1/2 | UDC: 537.531 : 535.37 | | |