

L 40772-65
ACCESSION NR: AP5006490

the effective magnetic fields that determine the dependence. The calculations were made for a magnetically uniaxial single crystal specimen possessing a domain structure and having the form of an ellipsoid. The calculations were compared with experimental data obtained for a single crystal disc of cobalt 9.8 mm in diameter and 1.4 mm high. The coercive force was measured by the ballistic throw method, using a photocompensated microvolt-ampere-weber meter. The coercive force measurements were made in such a way that the state of residual magnetism of the specimen was unambiguous. The experimental results are in agreement with the theoretical formula, which is thus shown to take sufficiently complete account of all the fundamental factors that determine the angular dependence of the coercive force in a multidomain magnetically uniaxial single crystal. Orig. art. has: 1 figure and 7 formulas.

ASSOCIATION: Institut fiziki metallov Akademii nauk SSSR (Institute of Metal Physics, Academy of Sciences SSSR)

Card 2/3

OSADCHIY, L.K.; SYRKIN, Yu.G., inzh.tekhnolog; VEKSHIN, K.D., mashinist
elektrovoza, Geroy Sotsialisticheskogo Truda; ONOPRIYENKO, L.N.,
mashinist elektrovoza; SHAROV, M.S.; MARKOVICH, I.A., mashinist-
instruktor

"Electric networks of the VL23 electric locomotive." Elek. i
tepl. tiaga 5 no.6:44-45 Je '61. (MIRA 14:10)

1. Depo Dnepropetrovsk (for Syrkin). 2. Depo Barabinsk
Zapadno-Sibirskoy dorogi (for Sharov).
(Electric locomotives)

ONOPRIYENKO, M.G.; SHINKARYUK, V.G.

Artesian water in Moldavia and the sanitary and technical
conditions of its use. *Zdravookhranenie* 6 no.3:9-12
My-Je'63 (MIRA 16:11)

1. Iz Upravleniya geologii i okhrany neдр pri Sovete Ministrov
Moldavskoy SSR i Gosudarstvennogo komiteta Soveta Ministrov
Moldavskoy SSR po vodnomu khozyaystvu.

*

ABSTRACT: The present paper is the first of a series on the NMR absorption spectra of neutralized aromatic and heterocyclic compounds at 100°C. (See also Ref. 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, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000)

TITLE: NMR Spectra of Neutralized Aromatic and Heterocyclic Compounds at 100°C. (See also Ref. 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, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000)

RECORDING: Chemical Abstracts, 1968, Vol. 6, Pt. 1, p. 111-112 (10)

ABSTRACT: The present paper is the first of a series on the NMR absorption spectra of neutralized aromatic and heterocyclic compounds at 100°C. The molecular and crystal structure proposed by the author for the hyperfine structure and constants are discussed. Measurements were made at 100°C. The work reported is an extension of the application of the deuteration method to isotopic exchange of hydrogen with liquid deuterium oxide in a solution of D_2O in liquid H_2O (Ref. 10). The results are given in Table I which shows that the deuteration method can be used in diphenyl, diphenylmethane, toluene, p-xylene, o-xylene, m-xylene, ethylbenzene, and styrene. The deuteration method may be replaced by deuteration of the compound followed by the method described in Ref. 10, which gives

Card 1/3

On Electronic Spectra of Aromatic Hydrocarbons in their Oriented Crystals

calculation of the number of replaced hydrogen atoms in the molecule. The last column of Table 1 shows that the number of replaced atoms is only a little from the total number of hydrogen atoms in the molecule in question. The following hydrocarbons were investigated: benzene, toluene, m-xylene, p-xylene, mesitylene, nitrobenzene, anthracene, p-quinacridone, diphenyl. The constants, such as refractive index, of the original and oriented samples are given in Table 2. Using polarized light we obtained the electronic spectra of the crystals listed in Table 1 (both in the oriented and non-oriented forms). Measurements were made at 10°C and the results are shown in Figs 1-7. The spectral changes produced by polarization are due, firstly to changes in the intensity of absorption, and secondly to changes in the crystal structure. The first process is observed as a shift towards the short wavelength region (100-200 cm⁻¹) and a decrease in frequencies of the absorption bands by a factor of 1.04-1.16. The crystal structure changes are observed as a polarization ratio for the absorption bands and in the splitting of the originally polarized bands. A.L. Liberman (Institute of Organic Chemistry, Academy of Sciences of the U.S.S.R.) prepared the original manuscript. A.I. Shchenshteyn and Yana. I. Liberman

June 1964

SOV/51-5-2-4/26

On Electron Spectra of Aromatic Hydrocarbons and their Deuterated Derivatives at 20°C

(Physico-Chemical Institute imeni Karpov) prepared deuterated compounds. V.L. Broude, M.I. Onopriyenko, O.S. Pakhomova and A.F. Prikhot'ko (Institute of Physics, Academy of Science of the Ukrainian S.S.R.) obtained and interpreted the electron spectra. The authors thank Yu. Antouchik for density measurements of the deuterated hydrocarbons and P. Manochkina for help in deuteration of the hydrocarbons. There are 7 figures, 2 tables and 16 references, 14 of which are Soviet, 1 American and 1 English.

ASSOCIATION: Institut fiziki AN UkrSSR; Fiziko-khimicheskiy institut im. Karpova (Institute of Physics, Academy of Sciences of the Ukrainian S.S.R.; Physico-Chemical Institute imeni Karpov)

SUBMITTED: July 16, 1957

Card 3/3 1. Hydrocarbons-d--Spectrographic analysis 2. Ultraviolet spectrum
--Applications

82947

S/051/60/008/005/006/027
E201/E491

5.3100

AUTHORS: Broude, V.L. and Onopriyenko, M.I.

TITLE: Absorption Spectra of Benzene Homologues.
IV. Characteristics of the Spectra of Crystals

PERIODICAL: Optika i spektroskopiya, 1960, Vol.8, No.5, pp.629-634

TEXT: Detailed investigations of the absorption spectra of benzene homologues at low temperatures (Ref.1 to 4) yield information on general properties on the spectra of crystals of these compounds. The present paper is an analysis of the experimental data on the exciton splitting of crystalline absorption bands, the profile and width of absorption bands and the sensitivity of crystalline spectra to small changes in the crystal structure. Fig 1. shows the splitting and polarization of absorption bands in the purely electronic transition region in the spectra of benzene crystals (1) and its methyl derivatives: high temperature modification of toluene (2), m-xylene (3), mesitylene (4); durene (5), low-temperature modification of hexamethylbenzene (6). The clearest exciton effects were observed in the absorption spectra of crystals whose molecules have a forbidden purely electronic transition in their free state. This Card 1/3

82947
S/051/60/008/005/006/027
E201/E491

Absorption Spectra of Benzene Homologues. IV. Characteristics of the Spectra of Crystals

contradicts Davydov's theory who predicted that the exciton splitting of the transitions forbidden in a free molecule should be considerably smaller than in the transitions allowed in a free molecule. E.I. Rashba suggested that agreement between theory and experiment could be improved by allowing for the effect of an interaction between electron excitation and the lattice vibrations on the magnitude of the exciton splitting (Ref. 7). The strong polarization of the absorption bands (Fig. 1) does not, by itself, indicate exciton origin. Polarization effects may be due to mechanical deformation of the crystal. This is illustrated for benzene crystals in Fig. 2, which shows that deformation increases separation of the $38351\text{--}38360\text{ cm}^{-1}$ doublet and weakens the short-wavelength component. Symmetry of the free benzene molecule is close to D_{6h} . In crystals the benzene symmetry is represented by the C_i point group. The difference between the interatomic separations of the free and crystalline state amounts to 0.005 \AA which is equivalent to 0.4%, the difference in angles amounts to

Card 2/3

82947

S/051/60/008/005/006/027
E201/E491

Absorption Spectra of Benzene Homologues. IV. Characteristics of the Spectra of Crystals

1°14' or 0.8%. Non-coplanarity of the atoms is due to their displacement from the plane of the ring by 0.0013 Å (Fig.3). These small changes in the structure of the molecule are quite sufficient to alter the purely electronic transition from the forbidden status in a free molecule to the allowed status in a crystal, i.e. very small changes of molecular structure produce a noticeable effect in the absorption spectra. The authors discuss also qualitatively the profiles of the absorption bands of crystals and conclude the paper with acknowledgments to A.F.Prikhot'ko and E.I.Rashba for their advice. There are 3 figures, 1 table and 10 references: 9 Soviet and 1 English. ✓

SUBMITTED: September 15, 1959

Card 3/3

S/051/60/008/06/011/024
E201/R691

5.3100

AUTHORS:

Bronde, V.L. and Onopriyenko, M.I.

TITLE:

The Absorption Spectra of Benzene Homologues. V. The Spectra of Toluene Crystals at 20°K

PERIODICAL:

Optika i spektroskopiya, 1960, Vol 8, Nr 6, pp 815-823 (USSR)

ABSTRACT:

The absorption spectra of amorphous and crystalline toluene were obtained at 20°K and interpreted. The physical constants of 99.6% pure toluene used by the authors were: melting point of -95.00°C, boiling point of 110°C, $d_4^{20} = 0.86694$, $n_D^{20} = 1.4970$. Toluene was prepared and purified in the laboratory of A.L. Liberman (Institute of Organic Chemistry, Ac. Sc. USSR). The spectra of monocrystals in polarized light were obtained by means of a spectrograph ISP-22. The samples were prepared and cooled in a special metal crystal (Ref 3). The results are shown in Figs 1-4 and their interpretation is given in a table on pp 820-822. Comparison of the toluene and benzene spectra showed that the aromatic C--C bonds in toluene are not all equivalent. It was also found that the broadening and the diffuse nature of the bands of the low-temperature modification of toluene (Ref 2) are due to imperfections of these

Card 1/2

S/185/61/006/006/017 130
D299/D304

AUTHOR: Onopriyenko, M.I.

TITLE: Some problems of analysis of electron spectra of
molecular crystals

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 6, no. 6, 1961,
796 - 797

TEXT: It is pointed out that the complete article will appear in
the Ukr. fizychn. zh., v. 7, no. 1, 1962. The theory, developed for
free molecules, is applied to a study of the energy states of mole-
cular crystals, to which "localized" excitons correspond. The study
of the spectra of molecular crystals is of particular interest, as
the polarization of electron transitions could be determined by the-
se spectra. The polarization of electron transitions being closely
related to molecular symmetry, this would make it possible to as-
certain the molecular structure. In addition, spectral analysis makes
it possible to interpret the vibrations of molecules. As an il-
lustration, the spectra of the high-temperature modification of me-
Card 1/2

Some problems of analysis of ...

S/185/61/06/00/17/110
B299 D304

taxylol crystals are analyzed in polarized light, at 300°K. The existence is established of electron transitions, polarized along the x, y, and z axes of the molecule. Other electron transitions were also discovered, whose polarization does not lie in the direction of the axes of the molecule. It is shown that these transitions are due to slight deviations of molecular symmetry from C_{2v} . The joint study of the polarization of electron-vibrational transitions, and of the symmetry and shape of the corresponding vibrations can be used for determining the actual structure of molecules. As an example, the value is considered of the valence vibrations of the C_{sp}^2-R bond in order to determine the deviation of this bond from a plane, parallel to the carbon ring of molecules. The fundamental molecular vibrations are interpreted [Abstractor's note: Complete translation.]

Card 2/2

BROUDE, V.L.; ONOPRIYENKO, M.I.

Absorption spectra of crystals of ordinary and deuterated benzene
at 20°K. Opt. i spektr. 10 no.5:634-639 My '61. (MIRA 14:8)
(Benzene crystals--Spectra)

ONOPRIYENKO, M. [Onopriienko, M.], inzh.

Electronic tuner. Znan. ta pratsia no. 4.20 Ap 1982. S. 12-13.
(Electronic apparatus and appliances)

S/185/62/007/002/006/01-
D299/D302

2/6/0

AUTHOR: Orobriyenko, M.I.

TITLE: Some problems of analysis of electron absorption spectra of molecular crystals

PERIODICAL: Ukrayins'kyy fizychnyy zhurnal, v. 7, no. 2, 1962,
180 - 198

TEXT: The work was reported to the First Ukrainian Congress on Physical Optics and It's Uses in the National Economy, held at Kyiv in 1961. The study of electronic spectra of molecular crystals is of particular interest in connection with determining the polarization of electronic transitions. By studying the polarization, it is possible to determine the molecular structure. In addition, the molecular vibrations can be also interpreted by spectral analysis. In studying the energy states of molecular crystals which correspond to "localized" excitons, it is possible to use free-molecule theory. As an illustration of this approach, the absorption spectra are analyzed of the high-temperature modification of metaxylol crystals

Card 1/4

Some problems of analysis of ...

S/185/62/657/107/002/107
D299/D302

(at 20°K), in polarized light in the near-ultraviolet region of the spectrum. In order to determine the polarization of the transitions, the author uses the theory of electronic transitions under the effect of light in poly-atomic molecules. An analysis of the absorption spectra, indicated the existence of electronic transitions, polarized along the x-, y-, and z-axis of the molecule. In addition, 2 other electronic transitions were determined, whose polarization does not coincide with the molecular axes. It is shown that these transitions are due to slight deviations of the molecular symmetry from the group C_{2v} . As in the spectral region under investigation

(up to 2550 Å), a purely-electronic transition was observed only along the x-axis of the molecule, it can be assumed that the other purely-electronic transitions are found in the far-ultraviolet region of the spectrum. Further, molecular vibrations are considered. The totally-symmetric vibrations of molecules of benzene-homologues can be divided into 3 subgroups. The vibration (681 cm^{-1}) was of particular interest. It was found that this vibration (similar to vibrations of the $C_{ar}-R$ bonds in molecules of other benzene-

Card 2/4

ONOPRIYENKO, M.O., agronom

Tractor-drawn drag for moving manure to the field. Mekh. sil'.
hosp. 8 no.9:8-9 S 59. (MIRA 13:1)

1. Kolkhoz im. Stalina Yevsuyevskogo rayona, Luganskoy oblasti.
(Agricultural implements)

PETROV, R.P.; BATASHEV, B.G. [Batashov, B.H.]; ONOPRIYENKO, M.Ye.
[Onopriienko, M.IE.]

Some remarks on the stratigraphic scale of the Greater Krivoy
Rog Basin. Geol. zhur. 25 no.2:105-107 '65. (MIRA 18:6)

2-415
S 020 67 119 001,020 023
5107,807

26.2531

AUTHORS: Kuznetsov, V. A., Duzhin, V. L. S., Loginova, N. P.,
Likhacheva, I. Ya., Gerasimov, N. S., and Taimbal, L. Ye.

TITLE: Contact potential differences between some liquid metals and
tungsten

PERIODICAL: Doklady Akad. Nauk SSSR, v. 110, no. 1, 1967, 156-158

TEXT: This is a summary of the original research on contact potential
differences between liquid metals and their alloys (Dokl. 14, 1967 (1960)).
The contact potential differences were determined thermally by
measuring the voltage-temperature characteristics of a diode made of the pure
metal and then the alloy investigated as above. Based on the assumption
that the contact potential difference is approximately equal to the
difference of the zero-temperature potentials, and on the grounds that there is
a great difference between the zero-temperature potentials, it appears
advantageous to measure the contact potential difference (CPD),
particularly between Bi, Ga, Te, and Bi on the one hand, and their
respective alloys with Te on the other. Diff. alloys that arose were due

Card (X)

21915

... in the ... In conformity ...
... the ...
... the ...
... the ...

ASSOCIATION: To the ...
... A. N. Gorkov ...
... A. N. Gorkiy

PRESENTED: December 10, 1940, by A. N. Zinchenko, Academician

APPROVED: November 14, 1940

X

... 3

CNCPRIYENKO, N. V.

CNCPRIYENKO, N. V. -- "The State of the Nervous Apparatus of the Vagina and Uterus of the Cat in Various Physiological Periods and After the Administration of Estrogens (Experimental-Morphological Investigations)." Min Health RSFSR. Saratov Medical Inst. Saratov, 1955. (Dissertation for the Degree of Candidate in Medical Sciences).

So.: Knizhnaya Letopis', No. 6, 1956.

ОЩЕРИЙЕВ, Мир Васильевна

State of the Nerve Apparatus of the Vagina and Uterus of the Female Cat in Different periods, and after the Introduction of (estrone v)

Dissertation for candidate of a Medical Science degree. Chair of Histology and Embryology (lechnaya) (head, Dr G. A. N. Fov) and Histology (head, Prof. N. A. Ishlyev) of the Medical Institute, 1966

ONOPRIYENKO, N.V., kand.med.nauk

Changes in the ganglia of the vagina and uterine cervix in pregnancy. Akush. i gin. 35 no.3:38-44 My-Je '59.

(MIRA 12:8)

1. Iz kafedry akusherstva i ginekologii (zav. - prof.A.M.Foy) lechetnogo fakul'teta i kafedry gistologii (zav. - prof.G.A. Koblov) Saratovskogo meditsinskogo instituta.

(PREGNANCY, physiol.

changes in ganglia of vagina & cervix (Rus))

(VAGINA, innerv.

ganglia, changes in pregn. (Rus))

(CERVIX, UTERINE, innerv.

same)

ONOPRIYENKO, S. D.

USSR/Metallurgy - Nonferrous Alloys Heat Resistance

1 Feb 69

"Composition Versus Heat Resistance Diagram of the Ni-Al System," I. I. Anisimov, N. S. Mints, S. D. Onopriyenko, Inst of General and Inorg Chem, Acad Sci USSR

JAN USSR, Vol 18, No 1, pp 683-85

Studies dependence of heat resistance on compn of Ni-Al alloys up to 30% Al by wt. Establishes that heat resistance of solid solns of Al in Ni increases with increase in Al concn and reaches its max in region of complete soln of solid solns. Alloy corresponding to Ni₃Al is characterized by lowest heat resistance; solid solns based on Ni₃Al, rich with Ni or Al, have heat resistance higher than that of Ni₃Al. States that diagram of compn vs heat resistance permits detn of physicochem nature and boundaries of phase areas on Ni-Al constitution diagram. Presented by Acad S. T. Urazov 29 Nov 68.

PA 249T60

ONOPRIYENKO, Sergey Ivanovich; DONCHENKO, Aleksandr Ivanovich;
SLODKIY, D.I. [Solodkyi, D.I.], red.; MOROZKO, L.G.
[Morozko, L.H.], tekhn. red.

[The great campaign] U velykomu pokhodi. Kyiv, Kyivs'ke
obl. kryzhkovo-gazetne vyd-vo, 1963. 85 p. (MIRA 17:3)

1. Predsedatel' pravleniya art. li kovshevatskogo kolkhoza
imeni Lenina Tarashchanskogo rayona Kiyevskoy oblasti (for
Onopriyenko).

ACCESSION NR: AT4012722

S/2981/63/000/002/0119/0129

AUTHOR: Onopriyenko, V. A.; Khromov, V. G.; Romanova, L. S.; Tikhonov, G. F.

TITLE: Direct rolling of aluminum powder sheets

SOURCE: Alyuminiyevy*ye splavy*. Sbornik statey, no. 2. Spechenny*ye splavy*. Moscow, 1963, 119-129

TOPIC TAGS: powder metallurgy, aluminum, aluminum powder, sheet rolling, aluminum sheet

ABSTRACT: In both Russian and Western publications, the problem of rolling ferrous and non-ferrous powders has often been investigated, but no papers have dealt with the rolling of aluminum powder. In the present paper, the authors demonstrate the possibility of manufacturing sheets of foil made of SAP (sintered aluminum powder) by directly rolling the powder. Under these conditions, rolling of high-quality sheets requires a certain grain size of the grade APS powder. Rolling may be both cold or hot (at 300-320C), but the strips made of neated powder are stronger. A flow process has been designed for manufacturing foil made of SAP by simple rolling. Samples have been made with a thickness of 1 to 0.05 mm. The influence of the degree of deformation and of annealing on the ultimate strength, as well as on the density and hardness, was determined.

Card 1/2

ACCESSION NR: AT4012722

For degrees of deformation exceeding 50%, there was a decrease in these mechanical properties. The ultimate strength of 0.06 mm rolled sheet was 36-42 kg/mm² at 20C and 7-9 kg/mm² at 480C. "N. N. Kashirin, N. A. Malekhanov, M. A. Moiseyev, Ye. A. Petrov, B. A. Borok, A. P. Malin and A. N. Potapov also took part in the work." Orig. art. has: 14 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 13Feb64

ENCL: 00

SUB CODE: MM

NO REF SOV: 001

OTHER: 000

Card 2/2

ACC NR: AT6024938 (A,N) SOURCE CODE: UR/2981/66/000/004/0259/0263

AUTHOR: Bokova, L. S.; Onopriyenko, V. A.; Tikhonov, G. F.; Khromov, V. G.

ORG: none

TITLE: Rolling of aluminum powder into coiled bands with a compact edge

SOURCE: Alyuminiyevyye splavy, no. 4, 1966. Zharoprochnyye i vysokoprochnyye splavy (Heat resistant and high-strength alloys), 259-263

TOPIC TAGS: aluminum powder, powder metal compaction, metal rolling

ABSTRACT: The study had two objectives: (1) preparation of band billets no less than 10 m long and 1-1.7 mm thick from finely divided aluminum powder which are capable of being coiled up for further rolling into foil, and (2) design and construction of an attachment to the horizontal rolls of a rolling mill for the continuous rolling of aluminum powder into band billets with compact edges. APS-1 aluminum powder containing 6.7-6.9% Al_2O_3 , 0.15% Fe, and 0.12% fats was employed. It is shown that band billets approximately 1 mm thick can be rolled with 180 mm rolls only by using a special attachment for controlling the thickness of the band by limiting the angle of contact between the powder and the rolls and the supply of the powder to the rolling zone. The coiling (winding on a drum with a diameter of no less than 270 mm) of band billets 0.8-1.0 mm thick rolled from aluminum powder of fractions -0.1 +0.1, -0.1 +0.1, -0.2 and less was found to be feasible. The mechanical properties of finished

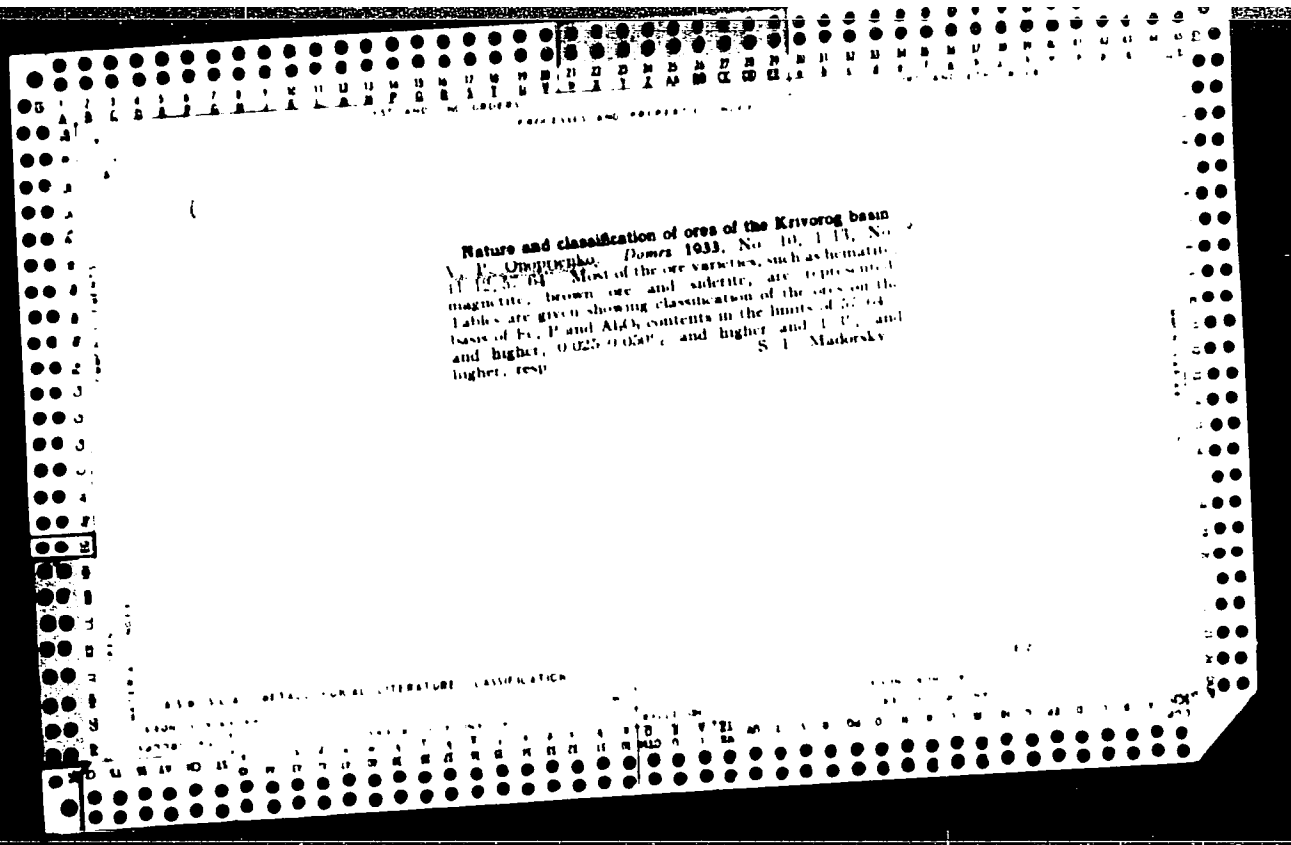
Card 1/2

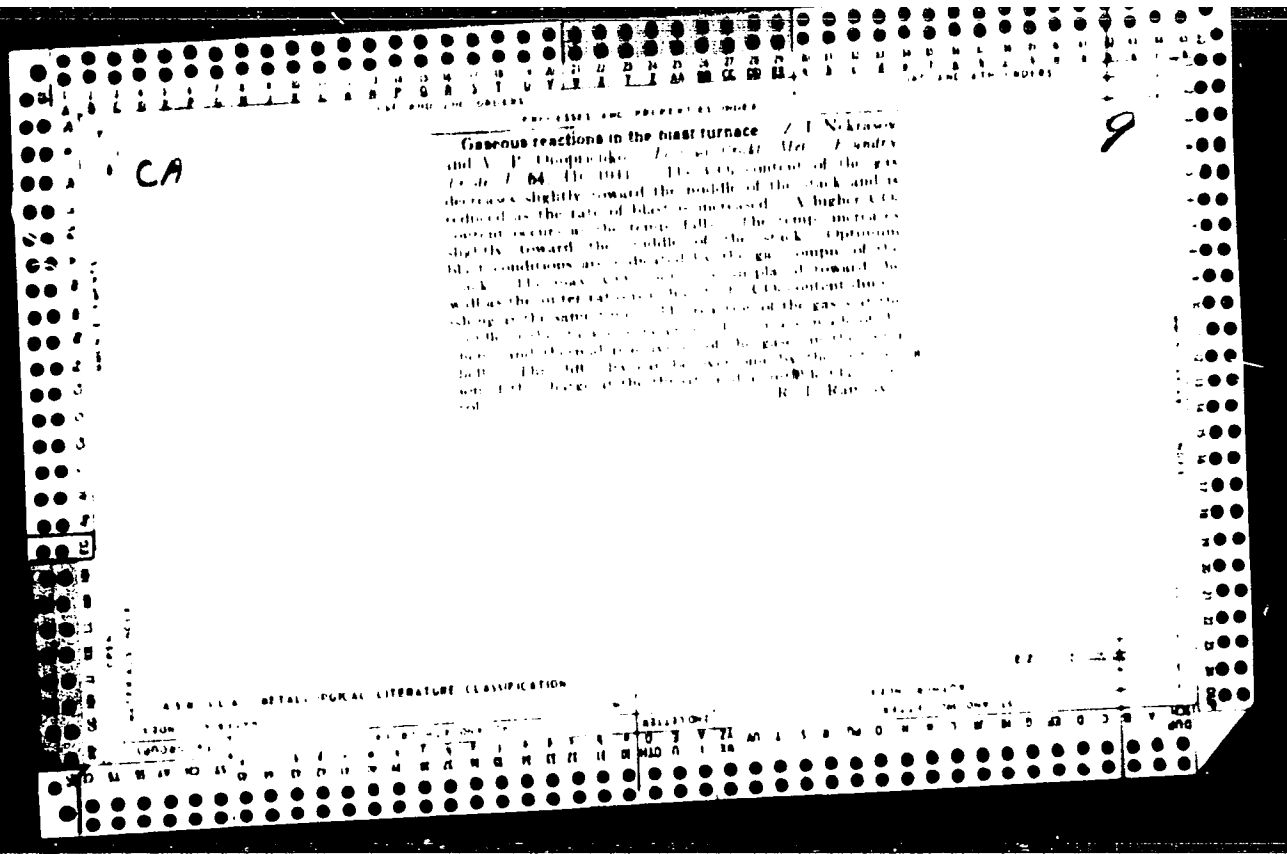
ACC NR: AT6024938

bands 0.1 mm thick do not depend on the initial thickness of the cast billet in the 1.0-0.8 mm range. Hot rolling of the band billet with a total reduction of no more than 50% is necessary prior to the cold rolling of the band. Orig. art. has 5 figures and 1 table.

SUB CODE: 11/ SUBM DATE: none

vj
cra 2/2





SOV:137-57-6-9505

Translation from Referativnyy zhurnal Metallurgiya, 1957, Nr 6, p 26 (USSR)

AUTHOR Onopriyenko, V.P.

TITLE The Iron Ores of Kerch and the Preparation Thereof for Blast-furnace Use (Kerchenskiye zheleznyye rudy i podgotovka ikh k domennoy plavke)

PERIODICAL Tr. Ukr. n.-i. in-ta metallov, 1956, Nr 2, pp 5-18

ABSTRACT. A history of the problem of the industrial utilization of Kerch ores (KO). Preparation of KO for smelting. A characterization of the properties of the sinter. Some unresolved problems of preparation of KO for smelting including the proportioning of the ores, fluxing of the sinter, and the problem of As removal.

M O

Card 1/1

~~ONOERIYEVIC, V. P.~~ kandidat tekhnicheskikh nauk; STARSHINOV, B.N., kandidat
tekhnicheskikh nauk; KHARCHENKO, N.M., inzhener BABIY, A.A., inzhener

Smelting low-manganese cast iron in southern plants Metallurgiya
no. 32-33 S '57. (MLRA 10-9)
(Russia, Southern--Metallurgical plants) (Ferromanganese)

ONOPRIYENKO V. P.

137-58-5-8984

Translation from: Referativnyy zhurnal. Metallurgiya, 1958, Nr 5, p. 34 (USSR).

AUTHORS Onopriyenko, V. P., Sidorov, N. Ye.

TITLE Some Concepts on the Problem of the Utilization of Fluxed Sinter at Plants of the Ukraine (Nekotoryye soobrazheniya k voprosu vnedreniya oflyusovannogo aglomerata v usloviyakh zavodov Ukrainy)

PERIODICAL Byul. nauchno-tekhn. inform. Ukr. n. s. in-t metallov, 1957, Nr 3, pp 3-10

ABSTRACT The need for fluxed sinter (FS) for blast furnaces has increased after this material was first introduced and adopted. Its increased consumption is attributable to its lower Fe content and to the increased intensity of the smelting processes. A deficit of FS may be supplanted by means of introducing standard or lump ore. Both methods are uneconomical. In the first instance the proportion of fines in the charge is increased, which makes it necessary to reduce the intensity of forced smelting, as well as the amount of ore being charged into the furnace. In the second case, owing to the lower Fe content of the ore, the production figures for smelting operations decrease while the pro-

Card 1/2

137 58-5-8934

Some Concepts on the Problem (cont.)

duction costs of pig iron become greater. In order to obtain additional amounts of FS the output of continuous sintering furnaces may be increased, but only up to a limited extent. The most effective method, therefore, is the introduction of additional continuous sintering furnaces. In order to improve the quality of FS it is advisable to build sintering shops on the same premises as the metallurgical plants, to install sifters for screening fines, and design new systems for cooling of the FS in order to prevent it from breaking up.

M O

1. Blast Furnaces--Operation. 2. Sintering--Applications

Card 2 2

130-9-16/21

AUTHORS: Onopriyenko, V.P. and Starshinov, B.N. (Cands.Tech.Sc.),
and Kharchenko, N.M., Babiy, A.A. (Engineers)

TITLE: Smelting Low-Manganese Pig Iron at Southern Works. (Vyplavka
malomargantsovistogo chuguna na zavodakh yuga)

PERIODICAL: Metallurg, 1957, Nr 9, pp.32-33 (USSR)

ABSTRACT: This article is based on material presented at an inter-works study group of blast-furnace operators from the South of the USSR by G.G. Oreshkin, I.N.Kardasevich, F.N.Yurmanov, I.G.Polovchenko, N.P.Kaystro, M.N.Abramovich and N. Ye. **Dunayev.** Until recently Southern works smelted relatively high-manganese pig irons. At the Dzerzhinskiy works in 1940 a successful attempt was made to reduce smelting costs of Bessemer iron by using less manganese ores, maintaining slag fluidity and desulphurising power by increasing the magnesia content. But with open-hearth iron a ratio of $(CaO + MgO + MnO) : SiO_2$ in the slag of 1.45-1.50 had to be maintained to give sufficiently low (0.045%) sulphur and manganese (0.80-0.85%) in the iron. This practice increased productivity by 4.2% and saved 4.2% and 80% on the coke rate and manganese-ore consumption, respectively. Optimal slag basicity was 1.28-1.30, magnesia and alumina in the slag being 5.5-6.5 and 5.5% respectively and blast temperature

Card 1/2

130-9-16/21

Smelting Low-Manganese Pig Iron at Southern Works.

750-800°C. Special attention had to be paid to smooth operation. The low-manganese iron was liable to become sulphurised on the way to or in the mixer. At a "Zaporozhstal" works furnace the manganese content of the iron was successfully reduced without increasing the magnesia content of the slag (4.5%) because its high alumina content secured fluidity. Reduction of the magnesia content harmed operation. At these works the general results of the low-manganese practice were unfavourable, but at the imeni Kirova works in Makeyevka lower coke rates and higher productivities resulted in most cases, though the variability of sulphur content increased. It is recommended that special attention be paid to charge preparation for smelting low-manganese irons.

AVAILABLE: Library of Congress.

Card 2/2

С. А. П. К. 1957

133-9-2/23

AUTHOR: Onopriyenko, V.P., Starshinov, B.N., Candidates of Technical Sciences and Trachenko, A.A., Sinitskiy, V.D., Freydin, L.M., Portnyy, L.Ya., Engineers.

TITLE: Operation of a Blast Furnace with 1.1 atm. Top Pressure.
(Rabota domennoy pechi s davleniem do 1.1 ati)

PERIODICAL: Stal', 1957, No. 9, pp. 772 - 778 (USSR)

ABSTRACT: The influence of top pressure variation from 0.6 to 1.1 atm. on the operation of a large (1386 m³) blast furnace was investigated. The profile of the furnace is shown in Fig.1. Characteristics of burden materials and coke during the individual test periods are given in Tables 1 and 2. Operating factors are given in Table 3. Changes in the distribution of CO₂ along the throat radius in Fig.2, the composition and temperatures of the peripheral and top gas in Fig.3, the pressure drop with the height of the furnace in Fig.4, changes in the gas pressure along the furnace throat radius in Fig.5. Changes in the length of tap hole and furnace-operating indices during various testing periods are given in Tables 4 and 5, respectively. On the basis of experience gained, the following conclusions are drawn: an increase of top pressure from 0.6 to 1.1 atm., contributes to the development of the peripheral flow of gases. In such case, Card 1/3 a decrease on the coke charge or an increase in the proportion

133-9-2/23

Operation of a Blast Furnace with 1.1 atm. Top Pressure.

of direct (ore first) charges (with simultaneous dropping of the whole charge) leads to an increase in amount of ore charged to the periphery with a subsequent decrease in the peripheral flow. Static pressure along the furnace height changes lineary. On increasing pressure of gas in the throat from 0.11 atm. to 0.46 atm. and blast volume from 1 400 to 3 400 m³/min, the blast pressure increased more than that of top gas, while the uniform drop of pressure along the height of the furnace was preserved. On increasing mean gas pressure in the furnace by an appropriate increase in driving rate, the blast pressure increases to the same extent as the pressure of gas in the throat. With a constant blast volume, the pressure of gas in the stack increases to a lesser degree than that in the throat. On transfer to a higher top pressure (1.1 atm.) the blast temperature can be increased by 20 - 50 °C and the driving rate increased by 2-6% (in comparison with operating conditions of a top pressure 0.6 - 0.8 atm). The operation of the furnace becomes smooth, but on decreasing top pressure back to 0.6 - 0.8 atm., the smoothness of the operation deteriorates. On increasing top pressure from 0.8 to 1.1 atm., the output of the furnace increased by 8.3% and the coke rate decreased by 2.9%. On decreasing pressure from 1.1 atm. to 0.6 - 0.8 atm., the output of the furnace decreased by 5.0 - 9.3%

^{P/}
ONOPRIYENKO, V.N., kand.tekhn.nauk; STARSHINOV, B.N., kand.tekhn.nauk;
STARSHINOV, B.N., kand.tekhn.nauk; TKACHENKO, A.A., inzh; SINITSKIY,
V.D., inzh.; FREYDIN, L.M., inzh.; PORTNOY, L.Ya., inzh.

Operations of the blast furnace no.3 at the Voroshilov Plant using
fluxed IUGOK sinter. Biul.TSNIICEM no.17:1-6 (325) '57.
(MIRA 11:4)

(Blast furnaces)

ONOPRIYENKO, V.P.; SULTANOV, S.Z.

Reaction of the size of the oil-water transition zone to feature of
the formation and the nature of its exploitation. Neft.khoz. 35
no.2:35-40 P '57. (MIRA 10:3)
(Petroleum geology)

TRKBIN, F.A.; ONOPRIYENKO, V.P.

Distribution of water-oil saturation in a porous medium in
connection with the displacement of oil by water. Azerb. neft.
khoz. 36 no.4:15-19 Ap '57. (MLRA 10:6)
(Oil field flooding)

(INPRIYENKO, VP)

18(5); 25(5)

PHASE I BOOK EXPLOITATION

SOV/1574

Kyyiv. Ukrayins'kyi naukovo-doslidnyy instytut metaliv

Vprovadzhennya novoyi tekhniky i tekhnologiyi na metalurhiynykh zavodakh
Ukrayiny; zbirnyk, t. 3 (Introduction of New Techniques and Technology
in Ukrainian Metallurgical Plants; Collection of Articles, Vol. 3) Kyyiv,
Derzhtekhvydav URSR, 1958. 192 p. 1,000 copies printed.

Exec. Ed.: H. Afonina; Tech. Ed.: P. Patsalyuk.

PURPOSE: The book is intended for metallurgists employed in rolling and
slabbing operations.

COVERAGE: This is a collection of 11 Ukrainian articles, compiled by 22
authors, some of whom are referred to as eminent specialists. The subjects
dealt with in the articles are: use of limestone-fluxed slag in making pig
iron, use of blast-furnace gas under increased pressure, use of oxygen in
making steel in open-hearth and Bessemer furnaces, description of a new
method of "intensified" squeezing of slabs in blooming mills. Some design
details, with direct references to actual plants and certain operational

Card 1/4

Introduction of New Techniques (Cont.)

SOV/1574

practices are also featured. Introduction of full mechanization of rolling processes at steel-works is taking place. Numerous diagrams accompany the text. Some articles have bibliographic entries, mainly Soviet.

TABLE OF CONTENTS:

Foreword	3
<u>Onopriyenko, V.P., and N.Ye. Sydorov. Quality of Limestone-fluxed Slag and Its Use in Ukrainian Metallurgical Plants</u>	6
<u>Onopriyenko, V.O., I.S. Lysenko, A.I. Soldatkin, and B.A. Petrukhin. Fluxed Slag Obtained From Kerch' Iron Ore and Limestone-Turtle Stone</u>	21
Pokryshkin, V.L. Formation of Metal and Slag in Blast Furnaces	39
Zaytsev, I.A. Some Problems in the New Technology of Running the High-phosphorus Pig Iron in Open-hearth Furnaces Under Application of Oxygen	58

Card 2/4

Introduction of New Techniques (Cont.)

SOV/1574

- Byelokurov, S.I., Ye. I. Bembinek, S.T. Zaykov, P.Ya. Kravtsov, and S.I. Stupel'. Use of Calcium-Silicon in the Deoxidation of Steel for Making Wheels and Tires 87
- Leve, N.F., G.A. Klemeshov, and S.S. Sandomyrs'ka. Effect of Nonmetallic Admixtures Upon Some Properties of Bessemer Steel, Deoxidized by Calcium-Silicon 92
- Aleksandrov, P.A., V.V. Klepanda, and Ye Ya. Ryznik. Ways of Increasing the Durability and Wear-resistance of Rolls in Rolling Mills 103
- Dolzhenkov, F.Ye. Unused Possibilities of Augmenting the Performance of Small-roll Slabbing Mills Working Large-size Slabs 117
- Filipov, I.N. Steel Rolling According to Technological Performance Charts; Compilation of Charts 140

Card 3/4

Introduction of New Techniques (Cont.)

SOV/1574

Kas'yanov, S.F. Introduction of Mechanization and Automation in
Ukrainian Metallurgical Plants

154

AVAILABLE: Library of Congress

GO/gmp
5-28-59

Card 4/4

124-58 9 10184D

Translation from: Referativnyy zhurnal. Mekhanika 1958 Nr 9 p 111 USSR

AUTHOR: Onopriyenko V P

TITLE: Investigation of the Motion of a Binary (Two-Phase) Incompressible Liquid in a Porous Medium (Issledovaniye dvuzhenniya dvukhfaznoy neszhimayemoy zhidkosti v poristoy srede)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the Moscow Institute of Petroleum (Moscow Petroleum Institute) Moscow 1958

ASSOCIATION: Mosk. neft. inst. (Moscow Petroleum Institute) Moscow

1. Liquid--Motion

Card 1/1

25(1)

PHASE I BOOK EXPLOITATION

SOV/2132

Kiyev. Ukrainskiy Nauchno-issledovatel'skiy institut metallov

Tekhnologiya proizvodstva i svoystva chernykh metallov; sbornik
(The Manufacture and Characteristics of Ferrous Metals; a collection
of articles) Khar'kov, Khar'kovskiy gos.univ. im. A.M. Gor'kogo,
1958. 271 p. (Series: Its: Trudy, vyp. 4) Errata slip in-
serted. 1,000 copies printed.

Editorial Staff of this book: P.A. Aleksandrov, D.S. Kazarnovskiy,
M.I. Kurmanov, N.F. Leve, V.P. Onopriyenko, V.A. Tikhovskiy, and
Ya. A. Shneyerov; Ed.: S.S. Liberman; Tech. Ed.: K.O. Gurin

PURPOSE: The book is intended for the scientific personnel of
institutes and for engineers and technicians of metallurgical
enterprises and other branches of the industry.

COVERAGE: The collection of articles reviews the work carried on at
the Institute of Metals on the technology of blast furnaces, open-

Card 1/6

The Manufacture and Characteristics (Cont.)

SOV/2152

hearth furnaces, and rolled stock production. It also deals with problems in metallography, heat treatment of ferrous metals and methods for their study. Particular attention is devoted to the preparation of charges and blast furnace practice with increased gas pressure, open-hearth production with oxygen blast and rolling of light profiles. No personalities are mentioned. References accompany each article.

TABLE OF CONTENTS:

BLAST FURNACE PRODUCTION

Onopriyenko, V.P., N.Ye. Sidorov, and V.I. Levchenko. Introducing Lime Into Sintering Charge to Intensify the Process of Sintering Ore	5
Brusov, L.O. The Effect of the Quality of Krivoy Rog Ore Sinter Upon the Operation of Blast Furnaces	15

Card 2/ 6

The Manufacture and Characteristics (Cont.)	SOV/2132
Lebedev, A. Ye. Preparation of Fluxed Sinter From a Concentrate of Kerch Ores	29
Soldatkin, A.I. Preparation of a High Fluxed Sinter from Manganese Ore	49
Brusov, L.P. Method of Estimating the Reducing and Thermal Gas Work in a Blast Furnace With Different Charges	71
Goncharov, B.F. Study of Processes in the Hearth of the Blast Furnace With Increased Blast Furnace Gas Pressure Steel Making	77
Sladkoshteyev, V.T. Slag-forming in an Open-hearth Furnace With Oxygen Blast	105
Zaytsev, I.A. Effect of Smelting Temperature Regime on the Dephosphorization Procees	119

Card 3/6

The Manufacture and Characteristics (Cont.) SOV/2132

Rabinovich, A.T. Effect of the Technology of the Working Period
of a Basic Open-hearth Smelting on the Hydrogen Content in Metal 155

Kovraskiy, V. B. and F.F. Sviridenko. Effect of the Working Period
of Phosphorous Cast Iron Reduction on Hairline Cracks
And Seams in Rails 155

ROLLING

Aleksandrov, P.A. Structure and Mechanical Properties of Rolled
Steel in Blooming Ingots 165

Gunin, I.V. New Light I-Beams 179

Dolzhenkov, F. Ye. Forward Slip in Rolling Heavy Strip 189

Filippov, I.N. Comprehensive Investigation, Generalization, and
Introduction of Progressive Methods and Innovators' Foremost Working
Methods on Section Mills 203

Card 4/6

The Manufacture and Characteristics (Cont.)

SOV/132

SCIENCE OF METALS AND HEAT METAL TREATMENT

Kurmanov, M.I., and G.G. Solov'yeva. Importance of Resilience Tests
For Evaluation of Sheet Steel Quality 221

Besedin, P.T. Causes For Formation of Flakes in Steel 233

Dyubin, N.P., D.S. Kazarnovskiy, K.N. Klimov, M.T. Bul'skiy,
A.N. Zannes, V.G. Gugulashvili, and O.R. Layzan. Prevention of
Flakes in 25 m. Rails Made of Open-hearth Steel 245

METHODS OF STUDYING THE QUALITY OF METAL

Leve, N.F. and A.B. Gurevich. The Composition of The Carbide Phase
in Low Carbon Unalloyed and Low-alloy Steels 257

Nikitina, O.I., M.G. Sklyar, and Z.G. Miroshnichenko. Determining

Card 5/6

The Manufacture and Characteristics (Cont.)

SOV/2152

Low Concentrations of Elements in Steel by Spectral Methods

261

AVAILABLE: Library of Congress (TN 607.T4)

Card 6/6

TM/ec
9/21/59

SHAN'GIN, S.N.; ONOPRIYENKO, V.P.; KLYAROVSKIY, G.V.

Preparing oil reserves for exploitation. Geol. nefti 2 no.6:62-65
Je '58. (MIRA 11:7)

(Petroleum geology)

ONOPRIYENKO, V.P., kand.tekhn.nauk; STARSHINOV, B.N., kand.tekhn.nauk;
NETREBKO, P.G.inzh.; YALOVY, D.S., inzh; RABINOVICH, G.B., inzh.

Blast furnace operation with blast furnace gas pressure over one
kg. gauge pressure. Metallurg 3 no.4:6 Ap '58. (MIRA 11:4)

1.Ukrainskiy institut metallov i zavod "Krivorozhstal'."
(Blast furnaces)

ONOPRIYENKO, V.P., kand. tekhn. nauk; SIDOROV, N.Ye., kand. tekhn. nauk;
LEVCHENKO, V.I., inzh.

Adding limestone to the burden to increase the speed of the ore
sintering process. Trudy Ukr.nauch.-issl. inst. met. no.4:5-13 '58.
(MIRA 12:3)

(Sintering) (Limestone)

130-58-4-4/20

AUTHORS: Onopriyenko, V.P., Candidate of Technical Sciences,
Starshinov, B.N., Candidate of Technical Sciences,
Netrebko, P.G., Yalovoy, D.S., Rabinovich, G.B., Engineers

TITLE: Blast-furnace Operation at a Top Pressure of Over 1
Atmosphere (Gauge) (Rabota domennoy pechi pri davlenii
koloshnikovykh gazov vyshe 1 ati)

PERIODICAL: Metallurg, 1958, Nr 4, p 6 (USSR).

ABSTRACT: The authors give operating data for Nr 3 blast furnace at the Krivorozhstal' Works smelting pig iron (2.3 - 2.75% Si) from a burden containing 96.7 - 100% sinter and 55.03 - 56.97% Fe for a period (March - October, 1956) when the top pressure was changed monthly in the range 0.46 - 1.13 atm (gauge). After allowing for the changing iron content of the burden, the authors conclude that raising top pressure from 0.46 - 0.71 to 1 - 1.05 atm. (gauge) leads to an increase in furnace productivity of 4 - 7% and a decrease in coke rate of 5 - 9%. The pressure drop through the furnace and flue-dust production decreased with increasing top pressure. With increased top pressure, the furnace tended to work up the walls and the coke charge was reduced from 6.3 - 6.45 to 5.6 tons, the charging cycles CCOxCSx and COxCCSx being Card:1/2 adopted. There is 1 table.

130-58-4-4/20
Blast-furnace Operation at a Top Pressure of Over 1 Atmosphere
(Gauge)

ASSOCIATIONS: Ukrainskiy institut metallov (Ukrainian Institute
of Metals) and zavod "Krivorozhstal'" ("Krivorozhstal'"
Works)

Card 2/2

ONOPRIYENKO, V.P., kand. tekhn. nauk; STARSHINOV, B.N., kand. tekhn. nauk

Effect of increased gas pressure on operating conditions of blast
furnaces. Biul. TSHIICHM no. 9:9-13 '58. (MIRA 11:7)
(Blast furnaces)

ONOPRIYENKO, V.P.

Water and oil distribution during the producing life of water-drive
pools. Trudy VNII 12:90-101 '58. (MIRA 12:3)
(Oil reservoir engineering)

EFROS, D.A.; ONOPRIYENKO, V.P.

Modeling linear oil displacement by water. Trudy VNI 12:331-360
'58. (MIRA 12:3)

(Oil field flooding) (Hydraulic models)

SOV/INT-1-1/20

AUTHORS: Shvarts, S.A., Shtatnovskiy, I.O. and Onopriyenko, V.P.

TITLE: The Evaluation of the Physico-mechanical Properties of Coke (Otsenka fiziko-mekhanicheskikh svoystv koksa)

PERIODICAL: Koks i Khimiya, 1989, Nr 1, pp 24 - 33 (USSR)

ABSTRACT: Various methods of determining the physico-mechanical properties and quality indices of coke and their correlation with the operation of blast furnaces were investigated. The object of the investigation was to submit samples of coke to parallel tests at a low and a high degree of degradation and to find out which corresponds more closely to the degree of degradation of coke in a blast furnace and which of the indices of physico-mechanical properties of coke is more closely related with the operational indices of blast-furnace operation. All tests were done on 50 kg samples. The tests were performed in a drum 1 m in diameter and 0.4 m long, rotating at 15 rpm. The results obtained with this drum after 150 revolutions corresponded to the standard Russian test in a large drum. The different degree of degradation was obtained by parallel tests at 150, 225 and 300 revolutions of the drum. Composite sample
Cardi/8 (proportional to the size distribution of coke) and single

3.7/10-1/10
The Evaluation of the Physico-mechanical Properties of Coke

size fraction (80-60 mm) of coke were tested. The following indices of coke quality were calculated:

- a) the amount left in the drum and the content of -10 mm fraction, according to the USSR standard;
- b) gas permeability index according to Syskov for samples which passed the test at 150, 225 and 300 revolutions;
- c) indices of uniformity and mean size of coke after testing at a low and a high degree of degradation of composite coke samples and samples of 80-60 mm coke fractions (at 150, 225 and 300 revolutions of the drum);
- d) strength indices calculating according to Graf (Stahl u. Eisen, 1956, Nr 5 p 133) from tests at 150, 225 and 300 revolutions of the drum; and e) aerodynamic index - "surface area of degradation" for composite samples tested at 225 revolutions of the drum. The investigation was carried out at the Kirov Rog Iron and Steel Works. Coke from one battery was studied. During the investigation (three months), the components of the coal blend remained constant. The composition of the blend during the first period of the investigation was %: G - 14, Zr - 47, A - 21, OS - 18 and during the

Card2/8

SCV/...-...-.../76
The Evaluation of the Physico-mechanical Properties of Coke

second period $G = \dots$, $Zn = \dots$, $K = \dots$ and $CS = 15$.
The coking period was often varied within limits of 15.5
to 16.5 hours. The temperature conditions followed these
changes but their establishment usually required some time.
Thus the main factor, determining changes in the mechanical
properties of coke were thermal conditions of coking. The
majority of indices related to these changes (Figures 1
and 2). Sampling and testing were carried out every four
hours. At least 400 samples were tested. Statistical
correlations between coke quality indices and coking
period were carried out. Correlation coefficients and
regression equations are shown in Table 1. All the indices
of the coke quality with the exception of the amount
left in the drum (standard test) correlated significantly
with the coking period. Low correlation coefficients for
gas-permeability indices for samples tested under conditions
of a high degree of degradation indicated that this method
of calculating this index is not applicable for such
testing (a high number of revolutions of the drum). The
influence of the coking period on the size distribution of
coke was also confirmed using data for the whole year

Card 3/8

The Evaluation of the Physico-mechanical Properties of Coke

(Figure 3). In order to establish which index of coke quality reflects its metallurgical properties, it was necessary to compare them with some indices of blast-furnace operation. It was considered that the most suitable index of furnace operation would be the temperature of the peripheral gases which well reflects the distribution of the gas stream on the periphery, independently of the causes determining this distribution. As for each furnace operating under a given set of conditions, there is an optimum distribution of gas flow which can be characterized by so small differences between extremes of temperatures in the measuring points that can be considered as an "ideal". If such "ideal" difference divided by the actual difference prevailing in a given moment or by a mean actual difference for a given time interval, then the ratio obtained could be used as a quantitative index - coefficient of the uniformity of the gas stream K . The higher this coefficient, the more uniform is the gas stream distributed along the periphery of the furnace. It should be pointed out that this coefficient does not take into consideration deflection of the gas stream from the periphery towards the centre of

Card 4/8

The Evaluation of the Physical-Mechanical Properties of Coke

the furnace and vice versa. For the purpose of these investigations, the "ideal" difference in the temperature differences along the periphery was taken as 25 °C and coefficient K calculated for 15 minute intervals, from which mean values for 4-hour periods were used for the statistical correlation. The correlation of other furnace operating factors such as hot blast pressure, pressure drop across the furnace, CO₂ content in peripheral gases and the distribution of CO₂ along the throat radius, the nature of spread of temperature indicated by thermocouples in the gas off takes and the diagram of stock descent with the coke quality indices were also tried. It was assessed for the purpose of correlation that the time interval between the coke leaving the coke ovens, its arrival at the furnace bunker and its descent to some depth in the furnace stack (when its influence on furnace operation becomes noticeable) amounts to 8 hours. From the periods of investigation of the coke quality, periods 1 and 2 were chosen for comparison with furnace operation as during these periods most distinct differences in the coke properties and considerable variations in these properties were observed (Table 1). The relevant data

Card 5/8

The Evaluation of the Physico-Mechanical Properties of Coke

characterising the quality operating conditions and operating indices of the blast furnace are given in Tables 2-4. The quality of sinter and the main parameters of the furnace operation during these periods were practically constant. The highest correlation coefficient was obtained for indices of the size distribution of metallurgical coke ($r = 0.43 - 0.67$) and size distribution after testing at a low degree of degradation ($r = 0.51 - 0.54$) 95% significance level $r = 0.52$. Less pronounced correlation was obtained with the mechanical strength of coke obtained at a high degree of degradation ($r = 0.33 - 0.39$). This indicates that in a blast furnace the degree of degradation of coke is comparatively low. From correlation coefficients for the individual size fractions, the highest was obtained for the fraction 40-25 mm ($r = 0.67$) which indicates a substantial negative influence of small coke fraction on the furnace operation. High correlation coefficients were also obtained for 0-20 mm fraction ($r = 0.46$) and the ratio $\frac{K_{40-25}}{K_{0-20}}$ ($r = 0.43$). Correlation coefficients between K and all indices of coke strength obtained in testing at a low degree of degradation were

Card 8

SOV/00-04-14/26

The Evaluation of the Physical-mechanical Properties of Coke

of the same order. Therefore, the value of the best coke quality index should be based on its degree of correlation with the principal factors of coke production. For these reasons, the index considered according to Graf is preferable. As one of the objectives of this work was to determine the simplest possible method of testing from the results obtained, the following can be concluded: the weight of the sample of 50 g is made from a single-size test specimen (mm) crushed at 25 rpm for 100-150 sec. This method is sufficient. The comparison of results obtained in parallel tests of samples made of single and composite size fractions is shown in Figures 4 and 5. As an index of coke quality, the following ratio is proposed:

$$\frac{\% (> 40)}{\% (40 - 25) + \% (< 10)}$$

which is similar but more sensitive than that proposed by Graf (Figure 5).

Carov/B

30V/200-100/10
The Evaluation of the Physico-mechanical Properties of Coke

There are 6 figures, 4 tables and 4 references, 3 of which are Soviet and 1 German.

ASSOCIATIONS: UKHIN and Ukrainskiy institut metalliv (Ukrainian Institute of Metals)

Card 5/8

ONOPRIYENKO, V.P., kand.tekhn.nauk; STARSHINOV, B.N., kand.tekhn.nauk;
BRUSOV, L.P., inzh.; LOZOVY, P.R., inzh.; BURDYUKOV, D.P.,
inzh.; ORLOV, V.S., inzh.

Sintering of Krivoy Rog magnetite concentrates. Trudy Ukr.
nauch.-issl.inst.met. no.5:36-52 '59. (MIRA 13:1)

1. Ukrainskiy institut metallov, Krivorozhskiy Yuzhnyy
gornoobogatitel'nyy kombinat i Krivorozhskiy metallurgicheskiy
zavod.

(Krivoy Rog--Iron ores) (Sintering)

ONOPRIYENKO, V.P., kand.tekhn.nauk; LEBEDEV, A.Ye., inzh.; PETRUKHIN,
B.A., inzh.; KONOPLYA, M.V., tekhnik

Selecting the better size of shell-limestone lumps for sintering Kerch ore concentrates. Trudy Ukr.nauch.-issl.inst.met. no.5:53-63 '59. (MIRA 13:1)

1. Ukrainskiy institut metallov i Kamysh-Burunskiy zhelezorudnyy kombinat.
(Kerch Peninsula--Iron ores) (Sintering)

ONOPRIYENKO, V.P., kand.tekhn.nauk; STARSHINOV, B.N., kand.tekhn.nauk;
POKRYSHKIN, V.L., inzh.; SINITSKIY, V.D., inzh.

Investigating the composition of cast iron produced in blast
furnaces operating with different gas pressures in the throat.
Trudy Ukr.nauch.-issl.inst.met. no.5:83-91 '59.

(MIRA 13:1)

(Cast iron--Analysis) (Blast furnaces)

STARSHINOV, B.N., kand.tekhn.nauk; ONOPRIYENKO, V.P., kand.tekhn.nauk;
BURDYUKOV, D.P., inzh.; KHALIMONOVA, V.I.; SERGIYENKO, L.I.

Sintering fluxed charges with additions of dolomitized
limestone. Metallurg 5 no.2:6-7 P '60.
(MIRA 13:5)

(Sintering)

ONOPRIYENKO, V.P.; ASZAKHOV, A.G.; STARSHINOV, B.N.; ORLOV, V.S.; BURDYUKOV,
D.P.; ROVENSKIY, I.I.; KUSHNIREV, V.A.; POKRYSHKIN, V.L.

Obtaining a high-basidity sinter out of Krivoy Rog iron ores.
Trudy Ukr. nauch.-issl. inst. met. no.6:7-22 '60. (MIRA 14:3)
(Krivoy Rog Basin--Iron ores)
(Sintering)

ONOPRIYENKO, V.P.; LEBEDEV, A. Ye.

Production of fluxed sinter from Kerch ore concentrates. Trudy
Ukr. nauch.-issl. inst. met no.6:23-33 '60. (MIRA 14:3)
(Kerch Peninsula—Iron ores)
(Sintering)

ONOPRIYENKO, V.P.; STARSINOV, B.N.; POKRYSHKIN, V.L.; SINITSKIY, V.D.

Expansion of iron reduction processes with use in the blast
furnace of fluxed sinter and increased pressure. Trudy Ukr.
nauch.-issl. inst. met. no.6:45-60 '60. (MIRA 14:3)
(Iron—Metallurgy) (Blast furnaces)

ONOPRIYENKO, V.F., kand.tekhn.nauk; LEBEDEV, A.Ye., kand.tekhn.nauk;
SOLDATKIN, A.I., kand.tekhn.nauk; IOZOVVOY, F.K., inzh.; PETR...IN,
B.A., inzh.; AREUZOV, V.A., inzh.; Primali uchastiye: FURMAN,
D.M., KONOPLYA, M.V.; KOTOV, A.I.

Pilot-plant production of sinter with a basicity of 1.2 from
kerch ore concentrates. Biol. TSIICPM no.10:17-22 '60.

(MIRA 1964)

1. Ukrainskiy institut metallov (for furman, konoplya).
L. Kamyshtunskiy kombinat (for kotov).
(Sintering) (Kerch Peninsula--Iron ores)

STARSHINOV, B.N., kand.tekhn.nauk; ONOPRIYENKO, V.P., kand.tekhn.nauk;
POKRYSHKIN, V.L., kand.tekhn.nauk; NETREBKO, P.G., inzh.;
YALOVOY, D.S., inzh.

Slag formation during blast-furnace smelting with fluxed
sinter. Stal' 20 no.8:673-680 Ag '60.

(MIRA 13:7)

(Blast furnaces) (Slag)

KLJAROVSKIY, G.V.; ONOPRIYENKO, V.P.

Programmin; the development of flowing wells. Neft.khoz. 35
no.5:3-39 My '60. (MIRA 13:5)
(Oil fields--Production methods)

ONOPRIYENKO, V.P., kand.tekhn.nauk; STARSHINOV, B.N., kand.tekhn.nauk;
SINITSKIY, V.D., inzh.; LAVRENT'YEV, M.L., inzh.; LUKASHIN, N.F.

Distribution and flow of materials in the blast furnace. Trudy
Ukr. nauch.-issl. inst. met. no.7:7-16 '61. (MIRA 14:11)
(Blast furnaces)

ONOPRIYENKO, V.P., kand.tekhn.nauk; STARSHINOV, E.N., kand.tekhn.nauk;
POKRYSHKIN, V.L., kand.tekhn.nauk; SINITSKIY, V.D., inzh.; BRUSOV,
L.P., inzh.

Limestone behavior in blast furnaces. Trudy Ukr. nauch.-issl. inst.
met. no.7:17-35 '61. (MIRA 14:11)
(Blast furnaces) (Limestone)

S/137/62/000/001/009/237
A060/A101

AUTHORS: Agaletskiy, P.N., Onopriyenko, V.P.

TITLE: On the problem of eliminating arsenic from brown Kerch iron ores

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 1, 1962, 16, abstract
1V120 ("Sb. tr. Ukr. n.-i. in-t metallov", 1961, no. 7, 81 - 90)

TEXT: Brown Kerch iron ore of 2 mm fraction was roasted in portions of 100 g in a stream of reducing gas passing at the rate of 2 l/min, and thereupon the ore was subjected to magnetic separation. In a stream of generator gas (25% CO) the Fe_2O_3 heated up to 600 and 900°C is reduced to Fe_3O_4 in 10 and 2-3 min respectively, and the arsenic contamination of the Fe (% As/% Fe_{tot}). 100% is reduced to 85-80 and 80% respectively of the initial one. The Fe concentration in the magnetic concentrate attains 51-53%; the degree of Fe extraction into a concentrate is 90%. The replacement of generator gas by H₂ only led to a reduction in the process duration. Heating of Kerch ores to 1,000-1,100°C in vacuum of 2 mm mercury for one hour leads to a decrease in the As concentration by 30-50% and to the reduction of 30-50% of the Fe_2O_3 to Fe_3O_4 . N. Inozemtsev
[Abstracter's note: Complete translation]

Card 1/1

VOLOSHIN, A.I.; BOGOYAVLENSKIY, K.A.; AKHTYRCHENKO, A.M.; TURIK, I.A.;
ZHIDKO, A.S.; LYALYUK, V.S.; GABAY, L.I.; ~~ONOPRIYENKO, V.P.~~;
STARSHINOV, B.N.; BABIY, A.A.; SAVELOV, N.I.; Primali
uchastiye: TORYANIK, E.I.; VASIL'YEV, Yu.S.; SHEMEL', T.I.;
SENYUTA, V.I.; BONDARENKO, I.P.; AMSTISLAVSKIY, D.M.;
ANDRIANOV, Ye.G.; SERGEYEV, G.N.; ZAMAKHOVSKIY, M.A.;
LYUKIMSON, M.O.; IVONIN, V.K.; TSIMBAL, G.I.; SEN'KO, G.Ye.;
KONAREVA, N.V.; SOLODKIY, Yu.L.; LUKASHOV, G.G.; TARASOV, D.A.;
GORBANEV, Ya.S.; SUPRUN, I.Ye.; TIKHOMIROV, Ye.I.; KONONENKO, P.A.;
PROKOPOV, V.N.; GULYGA, D.V.; PLISKANOVSKIY, S.T.; PONOMAREVA, K.Ye.

Effect of the length of coking on coke quality and the performance
of blast furnaces. Koks i khim. no.12:26-32 '61.

(MIRA 15:2)

1. Ukrainskiy uglekhimicheskiy institut (for Voloshin,
Bogoyavlenskiy, Akhtyrchenko, Turik, Zhidko, Lyalyuk, Toryanik,
Vasil'yev, Shemel'). 2. Zhdanovskiy koksokhimicheskiy zavod
(for Gabay, Senyuta, Bondarenko, Amstislavskiy, Andrianov,
Sergeyev, Zamakhovskiy, Lyukimson, Ivonin, Tsimbal). 3. Ural'skiy
nauchno-issledovatel'skiy institut chernykh metallov (for
Onopriyenko, Starshinov, Babi, Sen'ko, Konareva, Solodkiy).
4. Zavod "Azovstal'" (for Savelov, Lukashov, Tarasov, Gorbanev,
Suprun, Tikhomirov, Kononenko, Prokopov, Gulyga, Pliskanovskiy,
Ponomareva).

(Coke)

(Blast furnaces)

ONOPRIYENKO, V.P., kand.tekhn.nauk; LEBEDEV, A.Ye., kand.tekhn.nauk;
FURMAN, D.M., inzh.

Production of fluxed sinter for metallurgical processes. Stal' 21
no.2:97-102 F '61. (MIRA 14:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallo.
(Sintering)

MEL'NIKOVA, N.A.; ONOPRIYENKO, V.P. .

Geology and conditions of development of the Devonian oil pool of
the Sultangulovskiy-Zaglyadine field. Trudy VNIGNI no.30:224-232
'61. (MIRA 14:9)
(Orenburg Province--Oil reservoir engineering)

VAKHITOV, G.G.; SULTANOV, S.A.; SMOLYENKO, V.P.; KLYAROVSKIY, G.V.

Additional sectionarization of certain areas of the Romashkino
field. Neft. khoz. 40 no.10:29-33 0 '62. (MIRA 16:7)

(Romashkino region--Petroleum production)

PALON, I.D., kand.tekhn.nauk, ROMANENKO, N.T., inzh.; YIPKO, I.I., inzh.;
BOLKUNOV, Ye.P., inzh.; TULUYEV-YAYA, T.A., inzh.; ASTASHEV, P.I., inzh.;
VOLONIK, A.V., inzh. Prinsipialnaya uchastnye: BAYAKOV, I.I., VOKHENIK, A.S.;
KOLOS, V.D.; KAYSTRO N.P. [deceased]; LITVINENKO, V.I.; MAKARCHENKO, N.M.;
ONOPRIYENKO, V.P.; PALAGUTA, V.P.; PIKA, V.S.; RAGIN, B.I.; ROMANCHENKO,
Ye.I.; SAYENKO, S.D.; STOLYAR, V.V.; SKORIK, N.M.; TOROPENKO, P.D.

Characteristics of making ferromanganese in large capacity blast furnaces
and the effect of slag conditions on basic technical and economic indices.
Stal' 23 no.12:1069-1073 D '63. (MIRA 17:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov i zavod "Zaporozhstal".

...N... ..

... ..
... ..
... ..

KLYAROVSKIY, G.V.; LYSENKO, V.D.; MUKHARSKIY, E.D.; ONOPRIYENKO, V.I.

Efficiency in converting a well off to a mechanized form of
exploitation under conditions of predominant flow production
Neft.khoz. 42 no.4:37-42 Ap '64. (MIRA 11:1)

СОВЕТСКИЙ, НИЛ.; ГОПРИЕНКО, И. И., ред. техн. наук

Инструкция по эксплуатации. Изд. 1981. М.: МИИ. 164
(МИИ. 1981.)

YUPKO, L.D.; BALON, I.D.; KAYSTRO, N.P.; LITVINENKO, V.I.; GNOPRIYENKO, V.P.,
kand. tekhn. nauk; ROMANENKO, N.T.; TULUYEVSKAYA, T.A.

Arrangement of additional tuyeres, and their effect on blast
furnace performance. Sbor. trud. UNIIM no.9:71-98 '64

(MIRA 18:1)

UNCLASSIFIED

... ..
... ..
... ..

...

ONOPRIYENKO, V.P.; LEBEDEV, A.Ye.

Composition of the sinter charge mixture and its preparation
for sintering in sintering plants of the Ukrainian S.S.R.
Sbor.trud. UNIM no.11:7-17 '65.

(MIRA 18:11)

BABIY, A.A.; STARSHINOV, B.N.; KONAREVA, N.V.; NEZHNOV, G.N.; KUSHNAREV,
A.P.; KONAREVA, N.V.; FLOROV, K.N.;
BUDINSKIY, G.M.; VYSOCHIN, G.A.; A.N.; STRYGIN, V.I.;
AFANAS'YEV, A.A.; SAPRONOV, P.P.

Desulfurizing and dephosphorizing of iron in the ladle.
Sbor.trud. UNIM no. 1190

(MIRA 18:11)

SEN'KO, G.Ye.; ONOPRIYENKO, V.P.; TSARITSYN, A.N.; MOZGOVOY, V.M.; CHERNOV,
G.I.; KONAREVA, N.V.

Analysis of blast furnace performance with the automatic control of
the blast in the air tuyeres. Stal' 25 no.7:590-593 J1 '65. (MIRA 18:7)

1. Ukrainskiy nauchno-issledovatel'skiy institut metallov i Makeyevskiy
metallurgicheskiy zavod.