

L 35941-66 BWP(k)/EMP(t)/ETI LJP(c) JD/HV

ACC NR: AP6027381

SOURCE CODE: CZ/0034/65/000/009/0637/0644

37

B

AUTHOR: Zidek, M. (Docent; Engineer; Candidate of sciences)

ORG: Metallurgical Research Institute, VZKG, Ostrava (Vyzkumny ustav metalurgicky
VZKG)TITLE: Effect of the alpha-phase on the hot rolling conditions of austenitic
stainless steels

SOURCE: Hutnické listy, no. 9, 1965, 637-644

TOPIC TAGS: austenitic steel, stainless steel, hot rolling, metal stress, nickel
steel/1Ch18N9T stainless steel, 1Ch18N10M2T stainless steel

ABSTRACT:

Effect of the alpha phase on the workability of the steels, and the conditions under which the alpha phase is formed were investigated. When the alpha phase content exceeds 15-20%, considerable reduction of workability in the rolling of slabs is experienced. The influence of the temperature and period of stress relieving, and of other factors, upon the formation of the alpha phase in the stainless steels 1Ch18N9T and 1Ch18N10M2T with a graduated Ni content was determined. Reheating during the rolling process reduces the amount of the alpha phase. The influence of varying of the chemical composition of the steels upon their content of alpha phase is described. Orig. art. has: 11 figures, 3 formulas and 3 tables. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 11, 20, 13 / SUBM DATE: none / ORIG REF: 009 / SOV REF: 009 / OTH REF: 007

Card 1/1 ms UDC: 669-122.4: 669.14.018.8

L 349/2-56 EWP(k)/EWP(h)/EWP(w)/EWP(v)/EWP(t)/EWP(1)/STI/T

ACC NR: AP6026604

SOURCE CODE: C2/0057/65/000/012/0533/0537

AUTHOR: Sliva, Milan (Engineer); Zidek, Milan (Docent; Engineer; Candidate of sciences)ORG: Klement Gottwald Vitkovice Iron Works, Ostrava (Vitkovicka zelzarmy KG)

TITLE: Influence of the diameter of rolls upon the mechanical properties of cold rolled steel belts

SOURCE: Hutnik, no. 12, 1965, 533-537

TOPIC TAGS: mechanical property, cold rolling, carbon steel, metal deformation

ABSTRACT: The mechanical strength of the steel increases with increasing diameter of the rollers. The difference is greater in steels containing higher amounts of carbon, and increases also with increasing degree of deformation. When the diameter of the rollers changes in the ratio of 8:1, the difference in the strength varies by 4-5,000 kg / mm²; the difference in steels with high carbon content is approximately twice that. A substantial increase in strength is achieved by increasing the rolling pressures in cases where high carbon content steels have deformation on the order of 40-50%. Orig. art. has: 4 figures and 4 tables. [JPRS: 34,519]

SUB CODE: 11, 20 / SUBM DATE: none / ORIG REF: 002

Card 1/1

09/6 0300

Z/034/63/000/001/002/012
E073/E151

AUTHORS: Vojtovič, Miroslav, Engineer, and
Židek, Milan, Engineer, Candidate of Science.

TITLE: Influence of the final press-working temperatures on
the properties of low-carbon steel boiler bottoms

PERIODICAL: Hutnické listy, no.1, 1963, 29-36

TEXT: Hot pressing tests were carried out at 700-900 °C for producing boiler ends from steel plates 1000 mm diameter, 10 mm or 20 mm thick, using steels CSN 11364 (0.13% C, 0.39 Mn, 0.024 P, 0.035 S, 0.08 Cu, 0.03 Ni, 0.07 Cr) and CSN 11366 (0.11% C, 0.46 Mn, 0.20 Si, 0.016 P, 0.024 S, 0.09 Cu, 0.03 Ni, 0.06 Cr). The pressings were examined in the as-pressed state and after normalising. During pressing, the deformation varied between 0.5% at the centre, where the stresses were radial, and 30% at the rounded-off edge ($r = 100$ mm), where the degree of deformation increased very rapidly. In the critical deformation zones conditions for grain growth were unfavourable, and a uniform fine-grain structure was obtained. Non-uniform grain size occurred only in the flange, due to lower final forming temperature.

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Due to these variations, the mechanical properties at the centre were the same as pressed as after normalising, but at the edges the tensile strength was slightly greater as pressed and the ductility slightly lower, but still within the specification. The effect of pressing on the mechanical properties was greater at the edges, particularly with impact strength, and was more pronounced with the 10 mm plate. Thickness tests showed that pressing in special rigs with only one heating was satisfactory if the temperature at the end of pressing was 700-900 °C, the optimum being 780 °C. Below 700 °C internal stresses and structural non-uniformities appeared. Normalisation after pressing eliminated differences between the middle and edges and improved impact strength, particularly at low pressing temperatures. It is concluded that boiler ends can be pressed from non-alloy low-carbon steel, with a tensile strength as rolled up to 50 kg/mm², provided that it is heated above the Ac₃ point before pressing, and the temperature during pressing does not fall below 700 °C.

There are 12 figures and 6 tables.
ASSOCIATION: VŽKG, n.p., Ostrava

Card 2/2

ZIDEK, M., Inc.

"Continuous wide-band hot rolling mill trains" by V.G.Makogon,
V.F.Burjanov. Reviewed by M.Zidek. Hut listy 19 no. 0;683
5 '64.

ZIDEK, MELAN

Distr: 4E2c

✓ The effect of copper on the recrystallization temperature of low-carbon steels. Milan Zidek (Výzkumný ústav VŽKG, Ostrava, Czech.), Časopis články 14, 943-7 (1959). Up to a content of 0.20% Cu, the recryst. of steel takes place after 5 hrs. of annealing at 520 to 535°. When this limit of solv. of Cu in iron is surpassed, the recryst. temp. is increased by about 10 or 15°, and when the content of Cu is 0.60%, it increases quickly up to 600°. This increased recryst. temp. is due to the sepn. of Cu from the oversatd. solid soln. temp. The presence of Cr and Ni (over 0.10%) raises the recryst. temp., esp. when the content of Cu in steel is lower. 16 references.

Petr Schneider

"APPROVED FOR RELEASE: 09/19/2001

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REF ID: A6513R002065110008-8
MEMORANDUM
Vol XXX No 9, 1969

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APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110008-8"

Z/034/60/000/011/008/009
E073/E335

AUTHOR: Žídek, Milan, Candidate of Technical Sciences,
Engineer

TITLE: Development and Present State of Thick-sheet Rolling Mills and of Methods of Production

PERIODICAL: Hutnicke listy, 1960, No. 11, pp. 899 - 909

TEXT: Exhaustive review article dealing in great detail with developments in the major industrial countries.

I. Single-stand Thick-sheet Mills

This section deals mainly with West German developments. The main data are given for two typical Soviet mills (Table 2) - a heavy four-high mill 3300 for rolling slabs of 2000 x 600 to 1600 x (100-250) and a medium three-high mill 1800 for rolling slabs of 1500 x 600 to 1000 x (100-150).

II. Two-stand Sheet Mills

Data of some thick-sheet mills built in the USA, West Germany, USSR and France are entered in Table 3. This lists the following Soviet sheet mills: 2250 built in 1952, consisting of a two-high mill of 2500 x 900 and a four-high mill 2250 x 650/1200, producing sheets 4 to 25 mm thick and 2000 mm wide; with an annual capacity of 400 000 tons;

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Development and Present State of Thick-sheet Rolling Mills
and of Methods of Production

2300 built in 1952, consisting of a three-high mill of
2200 x 750/500/750 and a four-high mill 2300 x 740/1100,
producing sheets 4 to 20 mm thick and with a capacity of
400 000 tons per annum. Both the above are tandem mills
without an upsetting stand.

mill 2800 (Fig. 7) built in 1955, consisting of a two-high
mill of 2800 x 1150 and a four-high mill 2800 x 800/1400 -
upsetting rolls 1000 and 700 mm in diameter for rolling
sheets 4 to 50 mm thick, up to 2500 mm wide and up to 18 m
long - tandem mill with an upsetting stand having an
annual capacity of 900 000 tons.

The average metal and power consumption per ton of sheet
produced on the three here mentioned Soviet mills is as
follows:

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and of Methods of Production

	2800	2250	2300
Slabs, rimming steel, kg	1160	1200	1225
Slabs, killed steel, kg	1160	1224	1260
Slabs, alloy steel, kg	1260 to 14000	1380 to 1480	1270 to 1500
Ingots, rimming steel, kg	-	-	1360
Ingots, killed steel, kg	-	-	1570
Ingots, alloy steel, kg	-	-	-
Fuel oil, kg	47	56	-
Blast-furnace gas, m ³	560	370	815
Coke-oven gas, m ³	-	50	115
Electricity, kWh	55	65	65
Steam, kg ₃	49	56	34
Water, m ³	30	31.2	24
Compressed air, m ³	37	20	45
rolls, kg		2.1	2.0
			3.1

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Development and Present State of Thick-sheet Rolling Mills
and of Methods of Production

III. Semicontinuous and Continuous Mills

Table 5 gives data of older and more recent continuous mills
in respect of the USA, West Germany, Poland and the USSR.

The Geneva Mill, USA (Fig. 8) is compared with the Soviet mill

810 (Fig. 9) (two-high, 1016; two-high scale breaker 820;

four-high 810 for rolling sheets of 1.25 to 6.3 mm thick,

300 to 710 mm wide). Table 6 contains information of typical

and new continuous mills in the USSR, West Germany and Poland.

In this category the following Soviet mills are listed:

1450 for rolling sheets 1.8 to 5 mm, up to 1000 mm wide (to

be extended to sheets of up to 15 mm thick and up to 1280 mm

wide) with a capacity of 1.2 million t/a; 1680 for rolling

sheets 2 to 12 mm thick with an annual capacity of 1.5 million

t/a; the mill 1700 for rolling sheets 1.2 to 6 mm thick and

strip 1.2 to 10 mm thick and 600 to 1500 mm width with a

capacity of 2.1 million t/a and the mill 2500 for rolling sheets

3 to 5 mm thick, 500 to 2300 mm wide and strip 1.5 to 8 mm thick,

1000 to 2300 mm wide, with a capacity of 350 t/a (this figure is

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obviously erroneous). The latter two mills are at present in
the process of erection. Table 7 gives details of the
programme for rolling strips; slabs 125 mm thick, 1500 mm wide
and 2.5 m long are rolled into 4 mm thick, 2 000 mm wide,
63 m long sheets in 13 passes. The economics of semicontinuous
and continuous mills are favourable only for sheets which do
not exceed a certain value in thickness and width; if the
thickness exceeds 14 mm it is more economical to produce them
on tandem mills. There are 10 figures, 7 tables and 10
references: 1 Czech, 6 German, 1 English and 2 Soviet.

ASSOCIATION: VŽKG, Ostrava

Card 5/5

ZIDÉK, Milan, inz., kandidat technických ved

Problem of bonding low-carbon steel and stainless steel in making
clad sheets. Hut listy 16 no.1:19-28 Ja '61.

1. Výzkumný ustav, Vítkovické závody Klementa Gottwalda, Ostrava.

DEDEK, Vladimir, inz.; ZIDEK, Milan, inz., kandidat technickych ved

Hot and cold rolling of steel strips for dynamo sheets. Hut
listy 17 no.2:101-110 F '62.

1. Vyzkumny ustav, Vitkovice zelezarny Klementa Gottwalda,
Ostrava.

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110008-8

ZIDEK, M., inz.

"Formability of steel and alloys" by J.M.Cizikov. Reviewed by
M.Zidek. Hut listy 18 no.10:755 0 '63.

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110008-8"

ZIDEK, Milan, inz., CSc.; GLATZ, Bohumil, inz.

Present state and development of the production of thick clad plates and their properties. Pt. 2. Hut listy 18 no.8:562-566 Ag '63.

1. Vitkovicke zelezarny Klementa Gottwalda, n.p., Ostrava.

Z/034/61/000/001/003/021
E073/E535

AUTHOR: Židek, Milan, Engineer, Candidate of Technical Sciences

TITLE: Contribution to the Problem of the Bond Between Low Carbon and Stainless Steel in the Manufacture of Clad Sheets

PERIODICAL: Hutnické listy, 1961, No.1, pp.19-28

TEXT: First, information published in literature is reviewed. Following that, experiments are described in which the influence was investigated, on the carbon diffusion in the cladding plane and on the properties of thick sheets cladded with various stainless steels, of the following factors: heating temperature (400 to 1300°C), heating time (0.5 to 3 hours or 5 hours at 600 to 1200°C), cooling speed from cooling in the furnace at a speed of 200°C/hour right up to quenching in water from 900 and 1100°C. The results of determining the depth of decarburization in the basic steel and the depth of carburization in the cladding steel and of the shear strength are entered in Tables 3-5 and graphed in Figs.4-10. It was found that the heating temperature has the greatest influence on diffusion; the depth and the

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Contribution to the Problem of the Bond Between Low Carbon and Stainless Steel in the Manufacture of Clad Sheets

character of the transition zones are decisively influenced by temperature between the A_1 and A_3 points in the basic, low carbon, steel. Due to phase transformations, the carbon diffusion in the basic steel increased sharply in this temperature range so that the depth of the affected transition zones increased to double or even treble. As a result of formation of a coarse grain decarburized zone, the strength of the joint decreased by 30% and there was also a decrease in the toughness of the joint. Diffusion of carbon during heating of the combined ingots to the rolling temperature, and particularly during heat treatment of the clad sheets, does not improve the conditions of joining of the two steels. On the contrary, holding the material at elevated temperatures for long periods reduces the quality of the joint and also the mechanical and the anticorrosion properties of the clad sheets. In order to reduce the unfavourable influence of carbon diffusion on the properties of clad sheets, it is necessary to apply the following methods during manufacture: 1) To limit the times of heating at temperatures above 900°C, particularly during heat treatment; 2) during heat treatment of the cladded sheets, heating in the

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Contribution to the Problem of the Bond Between Low Carbon and Stainless Steel in the Manufacture of Clad Sheets
temperature range between the A_1 and A_3 points of the basic steel and also slow cooling within this temperature range should be avoided.

The compositions of the cladding and cladded steels used in the experiments were as follows:

Sheet thickness, mm	Steel	Chemical Composition in %					
		C	Mn	Si	Cr	Ni	Ti
16	AK1W	0.08	0.42	0.41	11.85	-	-
	15K	0.15	0.43	0.30	-	-	-
18	AKVS	0.13	1.12	0.98	19.20	10.20	0.51
	St3	0.14	0.42	0.25	-	-	-
28	AKVextra S	0.07	1.60	0.33	16.20	12.90	0.46
	11416	0.15	0.39	0.16	-	-	1.80

There are 12 figures, 5 tables and 15 references: 1 Czech, 4 Soviet, 8 German and 2 English.
ASSOCIATION: Výzkumný ústav VZKG, Ostrava (Research Institute VZKG, Ostrava)
SUBMITTED: September 26, 1960
Card 3/3

ZIDEK, M.

TECHNOLOGY

Periodicals: HUTNIK Vol. 9, No., 1 Jan. 1959

CHOLEVA, J.: ZIDEK, M. Effect of temperature on properties of thick plates after rolling and normalizing. p. 7

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

ZIDEK, M.; DEDEK, V.

Development in the cold rolling of steel strips for transformers up to 500 mm. in width.

p. 853 (Hutnické Listy) Vol. 12, no. 9, Sept. 1957, Praha, Czechoslovakia

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958

ZIDEK, M.

The chemical and structural nonhomogeneity of thick rimmed steel plates.

p. 298 (HUTNIK) Vol. 7, no. 9, Sept. 1957,
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

ZIDEK, M.

"Effect of hardening on the precision casting and properties of thick steel plates from 52 to 60 kgs. per sq. mm. in strength."

p. 151 (Hutnik, Vol. 8, No. 5, May 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 9, September 1958.

ZIDEK, M.

Development of gauging and rolling shoes for caterpillar vehicles.

P. 368 (Hutnik, Vol. 7, no. 11, NOv. 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

ZIDEK, M.; PEJCOCH, O.

ZIDEK, M.; PEJCOCH, O. Outlook for improving the quality of railway rims by manufacturing them from rolled round billets. p. 709.

Vol. 11, no. 12, Dec. 1956

HUTNICKE LISTY

TECHNOLOGY

Czechoslovakia

So: East European Accession, Vol. 6, No. 5, May 1957

ZIDEK, O.

Economy of water. p. 183.

Vol. 4, no. 5, May 1954
VODNI HOSPODARSTVI
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 8, August 1956

ZIDEK, O.

ZIDEK, O. Agricultural utilization of waste water in winter. p. 269

Vol. 35, no. 10, Oct. 1956

VODNI HOSPODARSTVI

TECHNOLOGY

Praha, Czechoslovakia

So: East European Accession Vol. 6, no. 2, 1957

~~ZIDEK R.~~

TECHNOLOGY

Periodicals: ENERGETIKA Vol. 9, no. 2, Feb. 1959.

ZIDEK, R: MRKVA, M. Acid cleaning of new boilers. p. 75.

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

ZIDEK, S.

Frequency of dystocia in the Kosice Obstetric and Gynecologic Clinic
and in the obstetric and gynecological department in Zilina in 1956-60.
Cesk. gynek. 27/41 no.8:577-581 '62.

1. Gyn.-por. klin. Lek. fak. UPJS v Kosiciach, prednosta prof.
dr. T. Schwarz.

(DYSTOCIA) (MORBIDITY)

PORADOVSKY, K.; ZIDEK, S.

Survey of perinatal mortality in eastern Slovakia in 1962.
Cesk. gynek. 29 no.6:444-447 Ag '64.

1. Gyn-por. klin. Lek. fak University P.J. Safarika v Kosiciach
(prednosta doc. dr. K. Poradovsky, CSc.).

PORADOVSKY, K., doc.; SEDLIAK, M., CSc.; ZIDEK, S.; KAHANIC, D.

Successful management of afibrinogenemia following amniotic fluid embolism. Cesk. gynek. 27/41 no.8:598-602 '62.

l. Gyn.-por. klin. Lek. fak. UPJS v Kosiciach, prednosta prof. dr.
T. Schwarz.

(EMBOLISM AMNIOTIC FLUID) (AFIBRINOGENEMIA)
(SHOCK) (OXYTOCICS)

I 34755-66

ACC NR: AP6026255

SOURCE CODE: CZ/0038/66/000/002/0065/0070

AUTHOR: Plch, Jiri; Zidek, VlastimilORG: Institute for the Research, Production and Use of Radioisotopes, Prague
(Ustav pro vyzkum, výrobu a využití radioizotopů)TITLE: Transistorization of portable radiometric instruments

SOURCE: Jaderna energie, no. 2, 1966, 65-70

TOPIC TAGS: radiometry, measuring instrument, transistorized circuit, pulse counter, gamma counter, scintillation counter, radiation instrument

ABSTRACT: On the basis of analysis of the properties of integrating circuits, the article discusses problems in the designing of transistorized radiometric instruments working on the principle of a pulse counter. An instrument is described which serves for the control of contamination of the object and also an instrument having the character of a gamma relay and scintillation counter for work in the field. This article was presented by V. Slezak. Orig. art. has: 7 figures and 8 formulas. [JPRS: 35,386]

SUB CODE: 18, 09 / SUBM DATE: none / ORIG REF: 002 / SOV REF: 003

Card 1/1 MGS

UDC: 539.12.074.5

0916

1807

GILLER, S.A.[Gillers, S.], ovtv. red.; BLEYDELIS, Ya.Ya.
[Bleidelis, J.], red.; BLYUGER, A.F.[Blugers, A.]red.;
ZIDERMANE, A.A., red.; PRESS, B., red.; BRAMBERGA, V.,
red.; LIDAK. M.Yu.[Lidaks, M.], red.; KOVI, O., red.;
SHUL'TS, I.

[Cyclophosphane] TSiklofosfan; sbornik statei. Riga, Izd-
vo "Znanie," 1965. 267 p. (MIRA 18:6)

1. Latvijas Padomju Socialistiskas Republikas Zinatnu
Akademija. Organiskas sintezes instituts.

SHIMANSKAYA, M.V., kand. khim. nauk, red.; ZIDERMANE, A.A., kand. med. nauk, red.; BLYUGER, A.F., kand. med. nauk, red.; LIDAK, M.Yu., red.; DYMARSKAYA, O., red.; PILADZE, Ye., tekhn. red.

[Thio-TEPA] TioTEFA. Riga, Izd-vo Akad. nauk Latviiskoi SSR, 1961. 180 p. (MIRA 15:3)

1. Latvijas Padomju Sotsialistiskas Republikas Zinatnu Akademija. Organiskas sintezes instituts. 2. Institut organicheskogo sinteza AN Latviyskoy SSR (for Shimanskaya, Lidak). 3. Sektor eksperimental'noy khimioterapii Instituta organicheskogo sinteza AN Latviyskoy SSR (for Zidermane).

(THIO-TEPA)

ZDRAV.

A bottle-washing machine developed by Fisnar. p. 546

PRUMYSL POTRAVIN. (Ministerstvo potravinarskeho prumyslu)
Praha, Czechoslovakia Vol. 10, no. 10, Oct. 1959

Monthly List of East European accession, (EEAI), IC, Vol. 8, No. 12, Dec. 1959
Uncl.

HEMMR, Bohumil; ZIDKA, Stanislav, inz.

Construction of a factory for prefabricated parts in Prunerov.
Poz stavby II no. 3139-140, 149-151 '63.

1. Armabeton, Praha.

ZIDKOV, N. P.

Call Nr.: AF 1108825

Transaction of the Third All-union Mathematical Congress, Moscow, Jun-Jul '56
Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.

Bakhvalov, S. V. (Moscow) and Zidkov, N. P. (Moscow).
Approximate Solution of the Direct Geodesic Problems.

138-140

ZIDKOVA, Aloisie, Inz.

A new variety of soybeans. Vestnik CSAZV 7 no.4:203 '60. (EEAI 9:9)
(Czechoslovakia--Soybean)

STEJSKAL, A.; PEKAREK, J.; ZIDLICKY, A.

The significance of amino acids for the growth of *Bordetella pertussis*.
Folia microbiol. 7 no.6:343-352 '62.

1. Institute of Sera and Vaccines, Prague 10, and Research Institute
for Pharmacy and Biochemistry, Prague 3.
(AMINO ACIDS) (BORDETELLA PERTUSSIS)

ZIDLICKY, J.

A new trend in the development of the construction of steam locomotives of the German Federal Railways.

p. 268 (Zeleznicni Technika. Vol. 5, no. 10, Oct. 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2,
February 1958

ZIDLICKY, Josef

ZIDLICKY, Josef

Parni lokomotivy. [Vyd. 1.] Praha, Statni pedagogicka nakl., 1953. (Ucebni texty vysokych skol) [Steam Locomotives. Vol. 1. bibl., diagrs.]

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4,
April 1954. Unclassified.

SCHUBERTOVA, J.; SVACINKA, J.; ZIDOVÁ, L.

Subacute pulmonary heart disease in tumorous obstruction of
the pulmonary bed. (Clinicopathological study). Cas. lek. cesk.
103 no. 50: 1376-1380 11. D '64

1. Vojenska nemocnice v Olomouci (veduci vnitriho oddeleni
MUDr. F.Cihalik) a Patologickoanatomicky ustav lekarske fakulty
Palackeho University v Olomouci (prednosta - doc. dr. F. Valach).

Zidova, L.

country: Czechoslovakia

Academic Degrees: MD

No 1 Clinic of Internal Medicine (1. vnitriai klinika) (in Olomouc). Head:
Affiliations: professor P. Hnil, MD.

Address: Prague, Vaclavské Lehenstvi, No 4, App 61, tel 433-439

Date: "Initial Calcification with Multiple Skeletal Pseudo-Fractures."

Co-authors:

ZIDOVÁ, A. Pathological Institute (patologicko-anatomický ústav) of PU (Palacký
University; Palacký University), Olomouc.

ZIDOVÁ, L. Pathological Institute, etc.

LACINA, Milos, MUDr.; STROVA, Vlasta, MUDr.; FRANTZOVY, Bohumil, MUDr.
Value of paper electrophoresis in cerebrospinal diagnosis. Česk. neur.
20 no.5:307-313 Sept 57.

I. M., stat. lekársky pracovník, Neurologická klinika v Plzni, profesor
prof. Dr. V. Šípka, ředitel oddělení ORL a v. plzn., preventivní klin. Dr. C.
Zwetschka.

ZIDOVÁ, VASTA, FISEROVÁ

LACIKA, Zdenek, MUDr.; ZIDOVÁ, Vasta, MUDr.; FISEROVÁ, Eva

Value of paper electrophoresis in cerebrospinal diagnosis. Cesk. neur.
20 no.5:307-313 Sept 57.

1. Mg. mat Ladislav Frasek. Neurologicka klinika v Plzni, prednosta
prof. Dr V. Pitha Interni oddeleni OUNZ v Plzni, prednosta prim. Dr. O.
Twetschke.

(CEREBROSPINAL FLUID, in var dis.
paper electrophoresis, diag. value (Gz))

LACIGA, Zdenek, MUDr.; ZIDOVÁ, Vlasta, MUDr.; FISEROVÁ, Eva;
PRASEK, Ladislav, Mgat.

Normal levels of cerebrospinal proteins in electrophoretic
picture. Cesk. neur. 19 no.4:256-265 Nov 56.

1. Neurologicka klinika v Plzni, prednosta prof. Dr. V. Pitha
Interni Oddeleni OUNZ v Plzni, prednosta prim. Dr. O. Zwetschke.
(PROTEINS, in cerebrospinal fluid,
electrophoretic standards (Cx))

ULRYCH, Jiri; ZIDOVSKY, Jan

Importance of biological readiness of the organism in labor induction
in prolonged pregnancy. Cesk. gyn. 24[38] no.8:586-595 O '59.

1. Ustav pro paci o matku a dite, praha-podoli, reditel doc. dr.
M. Vojta, zasl. lekar CSR.
(LABOR INDUCED)

ZIDOVSKY, J.

Vaginal cytology in pregnancy. Cesk. gynek. 29 no.1:31-36
F'64.

Importance of vaginal cytology for the determination of fetal
damage during prolonged pregnancy. Ibid:46-48

1. Ustav pro peci o matku a dite v Praze; reditel: doc. dr.
M. Vojta.

*

ZIDOVSKY, J.

Vaginal cytology in final stages of pregnancy and its clinical significance. Cas. lak. cesk. 99 no.22:[Lek. veda zahr.] p.106-113 27 My '60.

1. Ustav pro peci o matku a dite, Praha-Podoli, reditel doc. dr.
M. Vojta, zasloužilý lekar ČSR.
(PREGNANCY)
(VAGINAL SMEAR in pregn.)

ZIDOVSKY, Jan. (UPMD, Praha-Podolf, Nabr. K. Marxe 157.)

Role of cytodiagnosis in the establishment of delivery date in prolonged pregnancy. Cas. gyn. 23[37] no.4:292-304 June 58.

1. UPMD Praha-Podolf, prednosta prof. Dr. J. Trapl.

(PREGNANCY,

prolonged, cytodiag. method of establishment delivery date (Cz))

ZIDOVSKY, Jan; FALTINOVA, Blanka

A new method for staining and fixation of vaginal smears. Cesk. gynek.
26 no.9:712-713 N '61.

1. Ustav pro peci o matku a dite, Praha-Podoli, reditel doc. MUDr.
M. Vojta, zaslousilny lekar CSSR.

(VAGINAL SMEARS)

ZIDOVSKY, J.

importance of vaginal cytology for labor induction. Cesk.
gynek. 29 no.6:529-531 Ag '64.

1. Ustav pro peči o matku a dítě v Praze (ředitel doc. dr.
M. Vojta).

ZIDOVSKY, J.

Cytological diagnosis and prognosis of disturbances in the duration of pregnancy. Cesk. gynek. 29 no.4:270-273 My'64

1. Ustav pro peci o matku a dite v Praze; redital: doc. dr.
M.Vojta.

KAZDA, S.; BROTAKEK, V.; ZIDOVSKY, J.

Interference of exogenous oxytocin with the dynamics of uterine reactivity and vaginal cytology in pregnancy at term. Cesk. gynek. 28 no.7:474-478 S '63.

1. Ustav pro peci o matku a dite v Praze, reditel doc. dr.
M. Vojta.

(OXYTOCIN) (VAGINAL SMEARS)
(LABOR) (LABOR, INDUCED)

ZIDOVSKY, J.

Determination of the time of labor on the basis of an examination
of a vaginal smear and its diagnostic significance in prolonged
pregnancy. Akush. i gin. 36 no.2:37-45 Mr-Apr '60. (MIRA 13:12)
(LABOR(OBSTETRICS)) (VAGINA—SECRECTIONS)

ZIDOVSKY, Jan. KAZDA, Stanislav

The influence of synthetic estrogens on the vaginal mucous membrane
and cervix in the early stage of pregnancy. Cesk. gyn. 25[39] no.7:
516-521 S '60.

1. Ustav pro peci o matku a dite v Praze-Podoli, reditel doc.
MUDr. M.Vojta, zaslouzil lekar CSSR
(ESTROGENS pharmacol.)
(PREGNANCY physiol.)
(VAGINA pharmacol.)
(CERVIX UTERI pharmacol.)

ZIDOVSKY, Jan, Dr.

Vaginal cytological changes at the end of normal pregnancy.
Cesk. gyn. 22[36] no.4:280-288 May 57.

1. UPDM v Praze-Podoli, prednosta prof. Dr. Jiri Trapl.
(VAGINAL SMEARS, in pregn.
prior to end & at term, diag. value in prolonged
pregn. (Cx))
(PREGNANCY, physiol.
vaginal cytol. prior to end & at term., diag. value in
prolonged pregn. (Cx))

ZIDRASHKO, T.M.; GOLOVIN, D.I.

Effect of the uranium nitrate on the thyroid of white rats under chronic experimental conditions. Aakh. anat., hist. i emer. 44 no.5:63-67 My '63. (MIRA 17:6)

1. Kafedra gistollogii (zav.-dotsent I.P. Tyurina) Ternopol'skogo meditsinskogo instituta i kafedra gigienny (zav.-dotsent D.I. Golovin) Chernovitskogo meditsinskogo instituta. Adres avtorov: Ternopol', Teatral'naya pl., 2, Gosudarstvennyy meditsinskiy institut, Kafedra gistollogii.

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110008-8

ZIEBA, A. (Wroclaw)

An example in pursuit theory. Studia math 22 no.1:1-6 '62.

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110008-8"

CHARZYNKI,Z. (Lodz); ZIEBA,A. (Wroclaw)

Zamorski, Jan, December 27, 1927 - December 28, 1961.
Col math 10 no.2:361-364 '63.

ZIEBA, A.

5

v Krzywicki, A.; Rzewuski, J.; Zamorski, J.; and Zieba.
A Non-local problems in the calculus of variations. II.

Ann. Polon. Math. 4 (1957), 30-39.

In part I [same Ann. 2 (1955), 77-96, MR 17, 861] the authors considered the first variation for the problem of minimizing a functional of the form

$$I = \int_a^b \int_a^b L(l, l', q(t), q(t'), \dot{q}(t), \dot{q}(t')) dt dt',$$

where q is a function of a single variable. In this paper an oscillation theorem is derived for the linear integration for I when the integrand L is a quadratic form, under the assumption that there is a uniquely determined two-parameter family of solutions when a and b are fixed. Then the solutions are also the solutions of a second order linear differential equation, so the classical theorem of Sturm applies. Also the second variation of the integral, and sufficient conditions for a weak minimum are discussed.

ii. (Attention should be called to a dissertation by A. R. Jacoby [Iterated integrals in the calculus of variations, Univ. Chicago, 1946 (microfilm copies obtainable from

Kryzgowski
University of Chicago Libraries]], in which sufficient conditions for a semi-strong minimum for the functional I are derived. Here, "semi-strong minimum" means merely that a uniform bound on the derivatives of comparison functions $q(t)$ is assumed. The sufficiency proof given by Jacoby is an indirect one.)

J1
2/2

5

L. M. Graves (Chicago, Ill.)

ZIEBA, A.

An elementary proof of von Neumann's minimax theorem. In English. p. 224.
(COLLOQUIUM MATHEMATICUM. Vol. 4, no. 2, 1957. Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 12, Dec. 1957.
Uncl.

ZIEBA, A.

An example of the game of Banach and Mazur. In English. p. 230.
(COLLOQUIUM MATHEMATICUM. Vol. 4, no. 2, 1957. Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, no. 12, Dec. 1957.
Uncl.

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110008-8

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CIA-RDP86-00513R002065110008-8"

ZIEBA, Henryk

Better technical inspection of transit trains in the
Poznan District Administration of State Railroads.
Przegl kolej mechan ll [i.e. 16] no.2:45-46 F '64.

1. Railway Car Administration, Poznan District Administra-
tion of State Railroads.

ZIEBA, Henryk

Preparation of the car service of the Poznan District Administration
of State Railways for the winter 1963-1964. Przegl kolej mechan 10
[i.e.15] no.12:345-347 D '63.

1. Car Administration, District Administration of State Railways,
Poznan.

ZIEBA, J.

"Methods of the Rapid Estimation of the Basicity of Open-Hearth Slag" p. 9
(Wiadomosci Hutnicze, Vol. 9, No. 3, March, 1953, Stalinogrod)

SO: Monthly List of East European Accessions, Vol. 3, No. 2, Library of Congress,
February, 1954, Uncl.

"APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110008-8

APPROVED FOR RELEASE: 09/19/2001

CIA-RDP86-00513R002065110008-8"

Zieba, J.

✓ Effect of ultra-violet irradiation on viability of poultry. I. Irradiation of eggs during incubation. L. Kufnus, W. Gachowski and J. Zieba. II. Growth of chicks from irradiated eggs. L. Kufnus and B. Oreszakowicz. *Acta Univ. M. Curie-Sklodowska*, 1974, 5, N. 49-50, 59-101. - I. Irradiation (λ 3030-4060 Å) of hen's and duck's eggs, for 5 min daily during the first 6-9 days of incubation raises hatching rates by up to 33%, this effect is not observed with eggs irradiated on the 9th-16th days.

II. Ducklings from eggs which had been irradiated (5 min. daily for the first six days of incubation) hatched ~12 hr before controls, and grew faster, up to the age of 10 weeks. R. Tarczynski.

HD

ZIEBA, Jerzy, dr; SKAZINSKI, Andrzej, inz.

Influence of a dense mixed stock of carp on the ~~amount~~ of bottom fauna in a pond. Acta hydrobiol 6 no.3:207-217 '64.

1. Institute of Water Biology, Polish Academy of Sciences, Krakow, (for Zieba). 2. Experiment Fish Farms in Ochaby of the Institute of Water Biology, Polish Academy of Sciences, Krakow (for Skazinski).

ZIEBA, J.

"An Attempt to Reduce the Amount of Base Substances in Slag during Smelting Processes in Open-Hearth Furnaces" p. 8 (Wiacomosci Hutnicze, Vol. 9, No. 1, Jan., 1953, Stalinogrod)

SO: Monthly List of East European Accessions, Vol. 3, No. 2, Library of Congress,
February, 1954, Uncl.

P.T.A.

5-00

298 000.103.4 : 000.103.273.2
Zięba J., Eng. Control of the Basicity of Open-Hearth Slag on the
Basis of the Appearance of the Solidified Slag Cake.
"Kontrola zasadowości stalia martenowskiego na podstawie wy-
gladu zastygłego piaska". Hutnik No 7-8, 1950, pp. 198-204, 16 figa.
1 tab.

The method of control of slag basicity on the basis of slag cake
consists in pouring the liquid slag into the ingot mould and in ob-
serving the upper and the lower surface and the fracture of the so-
lidified slag cake. The tests carried out in steel works, for which 104
slag samples were taken and which were, later, chemically analysed,
made it possible to determine slag standards from which seven slag
types with increasing basicity were selected. The first group consists
of: the rime slags and the icy slags having a basicity of from 1.0--
1.6; the second: the folded slags having a basicity of from 1.6--1.9;
the third: slags with vanishing folds with a basicity degree from
1.9 to 2.2; the fourth: convex slags with a basicity degree from 2.3
to 2.6; the fifth: smooth slags having a basicity of from 3.0 to 3.2;
the sixth: latticed slags having a basicity of from 2.7 to 3.8; the
seventh: slag with silvery thin-coating having a basicity of from

3.5 to 5.0. With the increase of basicity, the contents of iron in slags
increase, and the contents of iron can also be estimated from the ap-
pearance of the slag cake, although with a lesser accuracy.

P.T.A.

Metallurgy

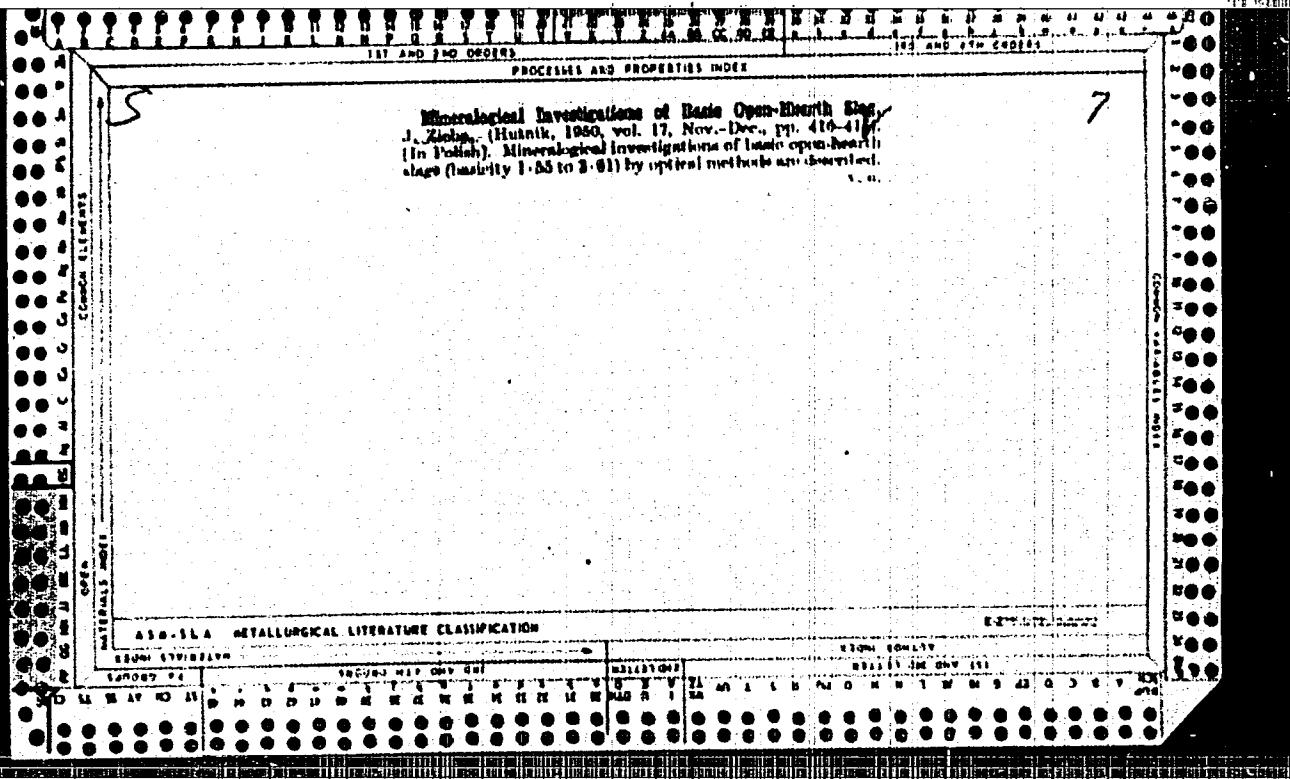
306

889, MJ 2

Zięba, J. Mineralogical Tests of the Basic Slag from Open-Hearth
Furnaces.

"Różdżka mineralogiczno-załadunkowa z zakładu marienowskiego",
Hutnik, No. 11-12, 1950, pp. 410-415, 12 figs., 2 tabs.

The two methods of mineralogical testing slag viz. in reflected
and in penetrating light. Mineralogical composition of slag. Appear-
ance of specific individual components of the slag, depending on the
quantity of basic elements in the slag, in penetrating light. Compo-
nents discernible in reflected light and the dependence of their
appearance on the basic properties of this slag. Discussion on the
usefulness of these two methods.



CA

9

*[Mineralogical investigations of the basic open-hearth slag.
Jerry Zlotin: "Hausse 17, 610-18(1960).—Z. presents two*

*optical methods, which can be used for investigation of basic
open-hearth slags. Both methods are based on optical
properties of chem. components of the slags; these compo-
nents being a function of the basicity of the slag. Two
kinds of light were employed for this purpose, e.g. reflected
and transmitted light. Z. lists components, which require
transmitted light for exam., and also those which can
be more advantageously observed in reflected light. An
evaluation of the practical application of both methods is
presented.*

A. I. P.

ZIEBA, Jerzy, dr

Influence of food-seeking carp on the insect larvae habitation
at the bottom of a pond. Acta hydrobiol 5 no.1:31-42 '63.

1. Zaklad Biologii Wod, Polska Akademia Nauk, Krakow.

ZIEBA, Jerzy, dr.

Bottom fauna of invertebrates in fishponds. Acta hydrobiol 5
no.2/3:79-127 '63.

1. Zaklad Biologii Wod, Polska Akademia Nauk, Krakow,
Slawkowska 17.

ZIEBA J.

Zieba J.

Zieba J., Eng. "Control of the Basicity of Open-Hearth Slag on the Basis of the Appearance of the Solidified Slag Cake." (Kontrola zasadowosci zuza marcenowskiego na podstawie wygladu zastyglego placka). Hutnik, No. 7-8, 1950, pp. 196-204, 16 figs., 1 tab.

The method of control of slag basicity on the basis of slag cake consists in pouring the liquid slag into the ingot mould and in observing the upper and the lower surface and the fracture of the solidified slag cake. The tests carried out in steel works, for which 106 slag samples were taken and which were, later, chemically analysed, made it possible to determine slag standards from which seven slag types with increasing basicity were selected. The first group consists of: the rime slags and the icy slags having a basicity of from 1, 0-1,6; the second: the folded slags having a basicity of from 1,6-1,9; the third: slags with vanishing folds with a basicity degree from 1,9 to 2,2; the fourth: convex slags with a basicity degree from 2,3 to 3,0; the fifth: smooth slags having a basicity of from 3,0 to 3,2; the sixth: latticed slags having a basicity of from 2,7 to 3,8; the seventh: slag with silvery thin-coating, having a basicity of from 3,5 to 5,0. With the increase of basicity, the contents of iron in slags increase, and the contents of iron can also be estimated from the appearance of the slag cake, although with a lesser accuracy.

SO: Polish Technical Abstracts - No. 2, 1951

ZIEMIA, Jerzy

Melting and
Metallography

(3)
Met

/ Check on basicity of the open-hearth slag by the appearance of the solidified sample. Jeray Zirbs (Inst. Odszkodowań, Poland). *Hdtnia* 17, 103-204 (1955).—It was found that checking basicity (I) of the slag from the open-hearth furnace by visual inspection of the solidified sample is accurate enough for routine control. I is the ratio CaO/SiO_2 , when it increases from 1.25 to 4.10 total Fe increases from 7 to 18%. When I is above 2.8, Fe begins to interfere in checking. This is due to change in color from gray to black gray or even black with some luster. When I increases still further to 3.8 the surface of the samples after solidification is broken up and looks like a "melt." When total Fe is 15-18% then the surface of I might have a no. of small spots resembling Ag.

F. J. Hendek

L 45509-66 WS-2

ACC NR: AT6020518

SOURCE CODE: CZ/2514/65/000/051/0162/0168

AUTHOR: Machalski, J.; Zieba, S.ORG: Department of Theoretical Astronomy and Astronomical Geophysics of the
Jagellonian University, CracowTITLE: Correlation between 810-Mc/sec radio bursts and chromospheric flares ✓✓SOURCE: Ceskoslovenska akademie vcd. Astronomicky ustav. Publikace, no. 51, 1965.
3rd Consultation on Solar Physics and Hydromagnetics, Tatranska Lomnica, 13-16
October 1964, 162-168TOPIC TAGS: parabolic telescope, solar radiation burst, solar disk, chromosphere
flare, solar radio emission, spectrum analysis, high frequency radio burst

ABSTRACT: The authors discuss the correlation between solar radio bursts at an 810 Mc/sec frequency and chromospheric flares; they determine the spectral type of these bursts. Observations of solar radio emission from the whole solar disk were made systematically with a 7-m parabolic telescope for 3710 hr, from early October 1957 to the end of December 1960. The 554 radio bursts observed were divided into four groups. The number of accidental coincidences was calculated and compared with that of observed coincidences. The ratio was studied, and the values of this ratio determined for each year and for each flare magnitude. It was shown that the ratio

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increases in individual years with a decreasing number of phenomena and does not increase regularly with the magnitude of the flare. The association of the four groups of 810-Mc/sec radio bursts with chromospheric flares was also studied. The results obtained were compared with those for 2800 Mc/sec and 100-580 Mc/sec. It was concluded that radio bursts resulting from flares predominate at high frequencies, and that the number of bursts related to flares decreases with increasing wavelength. At first, the total number of bursts decreases, but, after reaching a minimum, it increases to above the initial value. The spectral type of the 810-Mc/sec radio bursts is determined from the beginning of the flare. Only Freiburg Daily Maps of the Sun were used because no others were available. Orig. art. has: 6 tables, [GC] 3 formulas, and 2 figures.

SUB CODE: 03, ~~03~~, 08/ SUBM DATE: none/ ORIG REF: 003/
OTH REF: 005/

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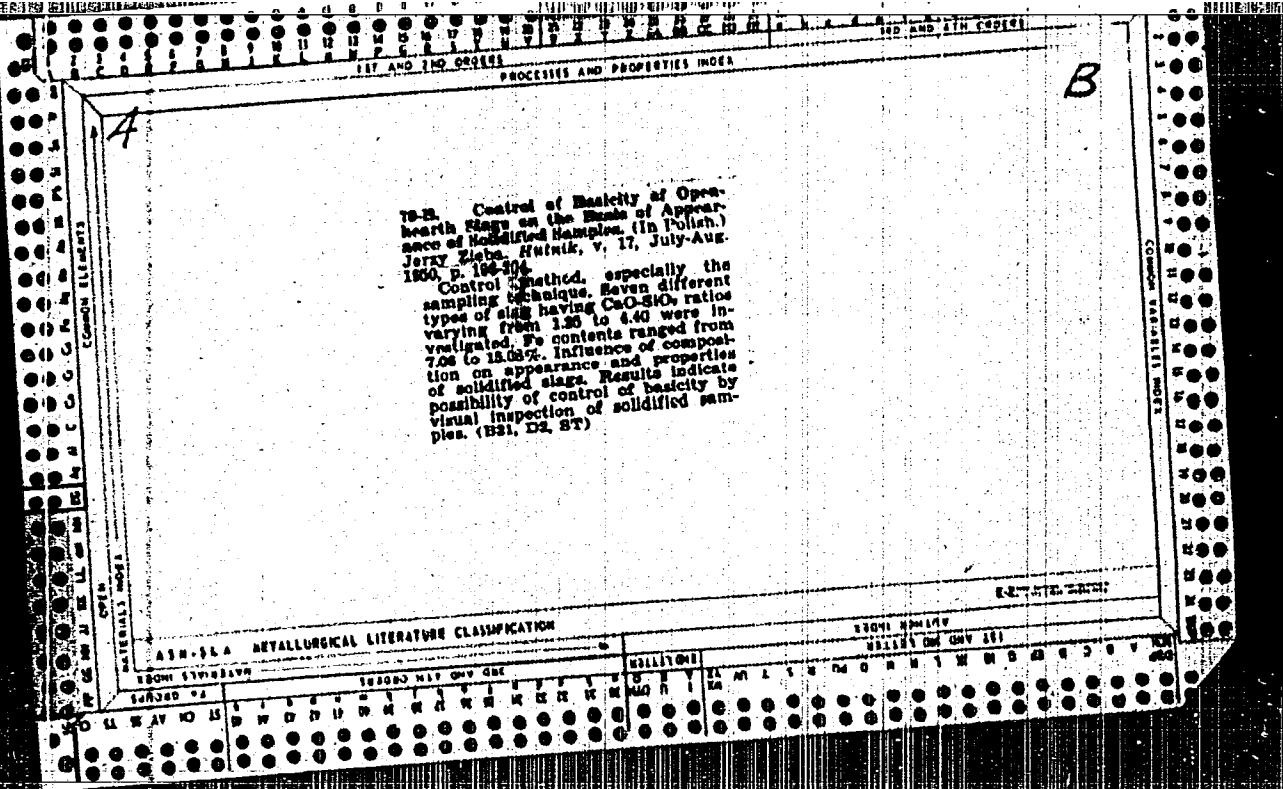
*Mel. Rev
1952*

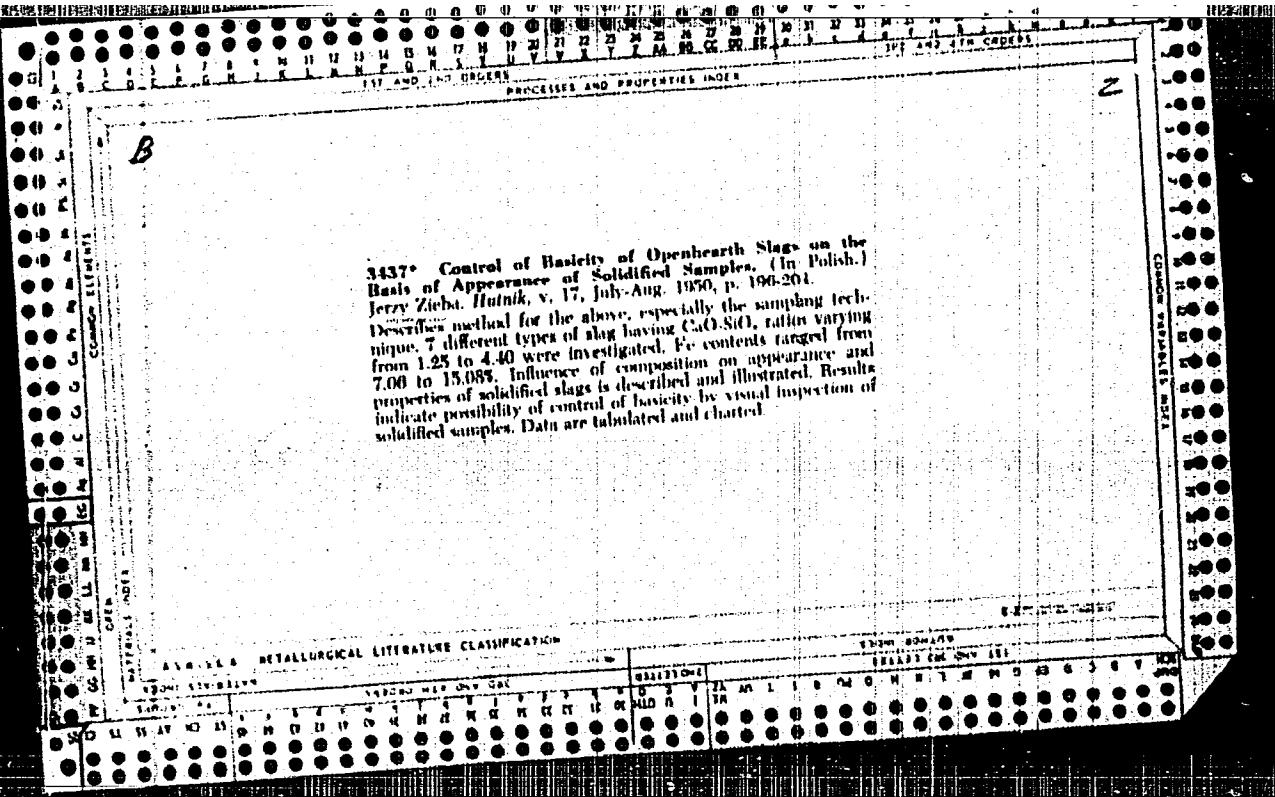
and Refining

48-D. Mineralogical Investigations
on Basic Openhearth Slags. (In Po-
llib.) Jerry Zieba. Tefnik, v. 17, Nov.
Dec. 1960; p. 410-415.
Evaluates two methods. Results
are tabulated and illustrated for
each of the phases present. Photo-
micrographs. (D2, ST)

APPROVED FOR RELEASE: 09/19/2001

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EJR

2

1120* Mineralogical Investigations on Basic Openhearth Slags. (In Polish.) Jerry Zelko. *Hutnik*, v. 17, Nov.-Dec. 1950.

Ap. 410-415.

Describes and evaluates two methods for the above. Results are tabulated and illustrated for each of the phases present. Photomicrographs.

ZIEBA, Tadeusz

SURNAME, Given Names

4
3

Country: Poland

Academic Degrees: [not given]

Affiliation:

Source: Warsaw, Medycyna Weterynaryjna, Vol XVII, No 6, June 1961,
pp 361-364.

Data: "Method for the Preservation of Erythrocytes for Serological Tests."

Authors:

JANOWSKA, Irena, Diagnostic Department (Zaklad Rozpoznawczy),
Veterinary Institute (Instytut Weterynarii), Pulawy; Director:

Edward GRYCZ, Doc dr.

ZIEBA, Tadeusz, Diagnostic Department, Veterinary Institute, Pulawy;
Director: Edward GRYCZ, Doc dr.

66

ZIEBA, TADEUSZ

(5)

Academic Degrees: [not given]

Affiliation:

Source: Warsaw, Medycyna Weterynaryna, Vol XVII, No 6, June 1961,
pp 361-364.

Data: "Method for the Preservation of Erythrocytes for Serological Tests."

Authors:

JANCISKA, Irena, Diagnostic Department (Zaklad Rozpoznawczy),
Veterinary Institute (Instytut Weterynarii), Pulawy; Director:
Edward GRYCZ, Doc dr.

ZIEBA, Tadeusz, Diagnostic Department, Veterinary Institute, Pulawy;
Director: Edward GRYCZ, Doc dr.

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OFO 981643

MOSZEW, J.; WIĘCZÓR, Z.; KIEŁA, U.

Addition of arylesters to isothiocyanates and isocyanic acid - through
Schiff's bases. Bull chim PAN 12 no.8:511-516 '64.

1. Department of Organic Chemistry of Jagiellonian University,
Krakow. Submitted April 8, 1964.

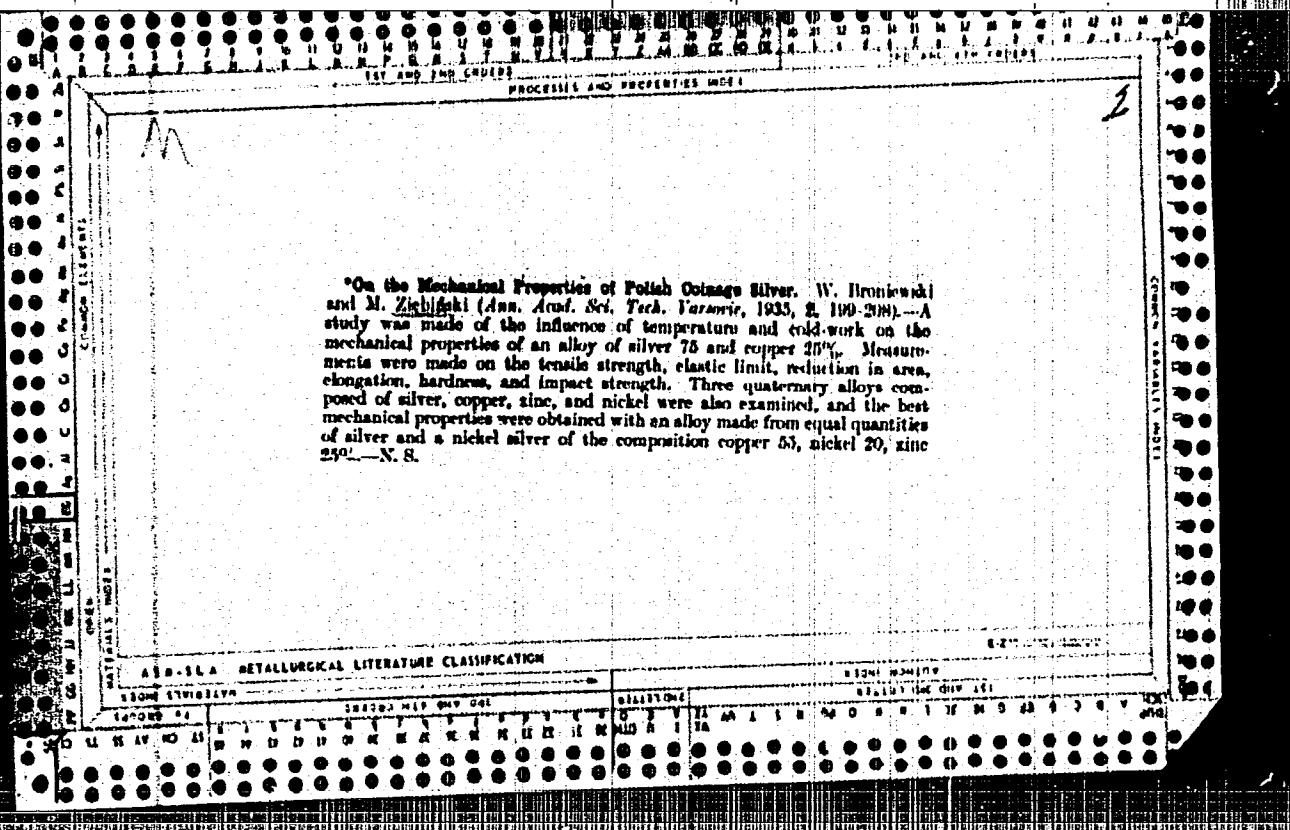
BOGDANOWICZ, Adam; ZIEBA, Zdzislaw

Share of the Prozamet Enterprise in the development of the Polish
shipbuilding industry during the years 1951-1962. Probl proj hut
maszyn 11 no.3:95-101 Mr '63.

1. Prozamet, Gdansk.

ZIEBS, J.

A. LUDKIEWICA, Prace Badawcze Glownego Instytutu Metalurgii
i Odlewnictwa, v. 1, n. 2, 1949, p. 155-161.



ZYGMUNT, Sabela; ZIEBICKI, Jerzy

Lymphosarcoma of the small intestine complicated by acute peritonitis.
Polski przegl. chir. 31 no.1:105-110 Jan 59.

1. Z III Kliniki Chirurgicznej Slaskiej A. M. w Bytomiu Kierownik:
prof. dr med. M. Trawinski i z Oddzialu Chirurgicznego Szpitala
Miejskiego nr 2 w Sosnowcu Ordynator: dr med. O. Wroblewski. Adres
autora: Jerzy Ziebicki, Sosnowiec, ul. Rozwojowa 21.
(LYMPHOSARCOMA, compl.

small intestine, with peritonitis (Pol))

(INTESTINE, SMALL, neoplasms

lymphosarcoma, with peritonitis (Pol))

(PERITONITIS, compl.

lymphosarcoma of small intestine (Pol))

SZARGUT, Jan; ZIEBIK, Andrzej

The exergue of chemical compounds in metallurgical processes.
Probl proj hut maszyn 13 no.2:40-49 F '65.

1. Silesian Technical University, Gliwice.

ACCESSION NR: AT4022289

P/2535/64/000/012/0083/0088

AUTHOR: Swierawski, Tadeusz (Doctor of engineering); Srweda, Jozef (Master of engineering); Scierski, Klemens (Master of engineering); Ziebik, Andrzej (Master of engineering)

TITLE: Design of subcritical system operating in conjunction with the nuclear reactor

SOURCE: Gliwice. Politechnika Slaska. Zeszyty naukowe, no. 99, 1964. Energetyka, no. 12. Materiały na Kongresatorium Spotkanie Techniki Konwencjonalnej i Technika Nuklearna (Materials of the Conference on General and Nuclear Engineering), 83-88

TOPIC TAGS: subcritical system, nuclear reactor, moderating water, reflecting water, graphite chamber, external neutron source, thermal pile uranium enriched fuel

ABSTRACT: A subcritical system is one which contains fissionable material and a moderator in such quantities and configuration, that is can never reach the critical state. Subcritical systems are very useful for research and experiments.

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ACCESSION NR: AT4022289

tion in nuclear physics and engineering. A necessary condition for the feasibility of such system is the existence of an external source of neutrons such as Ra-Be, Pu-Be, Po-Be, Sb-Be, or the accelerator or the thermal pile of a critical reactor. The analysis and evaluation of various types of subcritical systems have led to the selection of enriched uranium moderated with common water as best suited to conditions and requirements in Poland. It utilizes the thermal pile of the IRT pool-type reactor as external source of neutrons. A graphite chamber was designed for deflecting the path of neutrons. Those neutrons which have been dispersed by the graphite walls toward the gate on top, constitute a powerful source for the subcritical system located above the chamber. There are two shutters in the thermal pile, at a distance of 340 mm from its end surface: one made of cadmium 1 mm thick and one made of lead 150 mm thick; they control the radiation dose inside the graphite chamber. The core and the water, which serves as moderator and reflector, are in a container 16000 mm in diameter and 1200 mm high. This container is made of aluminum sheet, is covered with a biological shield, another aluminum coat and a cadmium coat. Both the subcritical system and the graphite chamber are surrounded by a concrete structure 2700x2800x5200 mm and 1000 mm thick. A labyrinth passage for the personnel is provided in the back of the biological shielding. The rear wall

Card 2/3

ACCESSION NR: AT4022289

here is made of steel plate 300 mm thick covered with 1 mm cadmium; this is equivalent to the thickness of the concrete wall, which was removed for installing this passage. The core of the subcritical system is made of EK-10 fuel rods (UO_2 with 10% enrichment into U-235 isotope, the only nuclear fuel available in Poland). These 688 rods form a cylinder 1000 mm in diameter and 500 mm high, weigh 6.5 kilograms. The square lattice parameter is at 34 mm, which corresponds to $k_{\infty} = 1.021$ and an effective coefficient of multiplication $k_{ef} = 0.88$. The maximum neutron flux is $1.65 \times 10^7 \text{ n/cm}^2\text{sec}$, the mean flux is $4.65 \times 10^6 \text{ n/cm}^2\text{sec}$.

ASSOCIATION: Polytechnika Slaska (Silesia Polytechnic Institute)

SUBMITTED: 00

DATE ACQ: 13Apr64

ENCL: 01

SUB CODE: PL, NS

NO REF Sov: 000

OTHER: 002

Card 3/6 3

ZIEBORAK, K.
Poland/Physical Chemistry, Thermodynamics, Thermochemistry,
Equilibriums, Phys.Chem. Anal. Phase-Transition.

B-8

Abs Jour : Ref Zhur - Khimiya, No 7, 1957, 22283

Author : K. Zieborak, H. Kaczorowna-Badyoczek, Z. Maczynska.

Inst : Not given

Title : Azeotropic and polyazeotropic systems.

Orig Pub : Roczn. chem. 1955, 29, No 2-3 783-790.

Abstract : By method described before (RZh Khim., 1954, 25327) with the aid of a Swietoslawski's differential ebulliometer (Swietoslawski W. Ebulliometric Measurements, No 4, 1945) were measured boiling and dew points of trinary systems: n-octane-2,6-lutidine-acetic acid (I); n-decane - 2,6 lutidine-acetic acid (II) at 760 mm of merc. column pressure. Isobars of (I) and (II) systems show spinal lines sharply displaced toward lutidine-hydrocarbon side. With analogous trinary azeotropic systems studied before, where the place of lutidine was occupied by pyridine, such a phenomenon was not observed. The difference between isobars of the two systems is ascribed by the authors to the circumstance that the azeotropic lutidine range in regard to saturated hydrocarbons is much less than that of

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Card 1/2

Thermodynamics, Thermochemistry,
Equilibrium, Phys.Chem. Anal. Phase-Transition

B-8

Abs Jour : Ref Zhur - Khimiya, No 7, 1957, 22283

APPROVED FOR RELEASE: 09/19/2001 CIA-RDP86-00513R002065110008-8"

pyridine. Author explains that by the structure of lutidine, in the molecule of which, nitrogen of the benzene ring is screened by two methyl groups. This circumstance changes the basic character of compound properties, approaching it to that of hydrocarbons. Communication XIX, look RZh Khimii, 1956, 28449.

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Zieborak, K.

POLAND/Physical Chemistry - Thermodynamics, Thermochemistry, Equilibria,
Physical-Chemical Analysis, Phase Transitions. B-8

Abs Jour: Referat. Zhurnal Khimiya, No 2, 1958, 3774.

Author : I: W. Swietoslawski, K. Zieborak, W. Brzostowski. II: K.
Zieborak, W. Brzostowski.

Inst : Academy of Sciences of Poland.
Title : Vapor-Liquid Equilibria. I. An Apparatus for Determining the
Vapor-Liquid Phase Equilibria. II. The n-Decane-Acetic Acid -
2,6 Lutidine System.

Orig Pub: Bull. Acad. polon. sci., 1957, Cl. 3, 5. No 3, 305-308, XXV.

Abstract: I. an apparatus for simultaneous boiling temperature measurement
and liquid and vapor composition determination is described. The
apparatus has been checked with the water-methanol system and
works faultlessly in all cases when vapor is in equilibrium with
only one liquid phase.

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Analysis, Thermochemistry, Equilibria,
Referat. Zhurnal Khimiya, No 2, 1958, 3774. B-8

II. The equilibrium liquid-vapor in the n-decane - acetic acid -
2,6-lutidine system and in binary systems composing it was stu-
died. The composition was determined by chemical analysis and
refraction indices of the mixtures. The system is characterized
by a limited mutual solubility of the components at 25°. All
the mixtures are single phase ones at the boiling temperature.
The positions of the crest line and of the point answering the
saddle azeotrope are determined.

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