

ACC NR: AP6036393

(A)

SOURCE CODE: UR/0032/66/032/011/1405/1406

AUTHOR: Bernshteyn, M. L.; Marko, I.

ORG: Moscow Institute of Steel and Alloys (Moskovskiy Institut stali i splavov)

TITLE: Characteristics of stress-strain diagrams of superstrength steel with strain-hardened martensite

SOURCE: Zavodskaya laboratoriya, v. 32, no. 11, 1966, 1405-1406

TOPIC TAGS: superstrength steel, steel thermomechanical treatment, stress strain diagram, strain hardening/50KhFA steel

ABSTRACT: Specimens of 50KhFA steel were subjected to a combined thermomechanical treatment (CTMT) which consisted of high-temperature thermomechanical treatment followed by quenching to obtain a martensitic structure and tempering at 200C for 2 hr, and low temperature thermomechanical treatment (LTMT) which consisted of cold deformation with 1-3% reduction followed by aging at 100C for 40 hr. The diagrams of the conventionally treated specimens did not show a distinct yield point. The thermomechanically treated specimens, however, show very distinct upper and lower yield points (see Fig. 1). The difference between these two points increased with increasing reductions in LTMT, and in specimens deformed with 3% reduction, amounted to 55 kg/mm². It is assumed that aging of martensite whose matrix

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UDC: 620.172.2

ACC NR: AP6036393

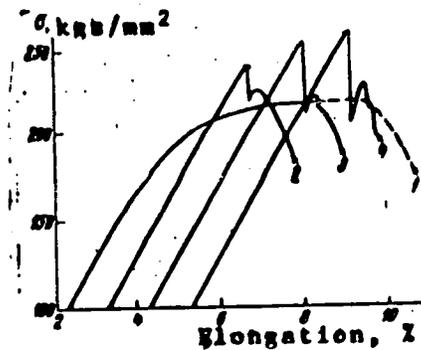


Fig. 1. The effect of reduction in martensite deformation on the shape of the stress-strain curve of 50KhFA steel

1 - Conventionally hardened and tempered at 200C; 2 - same with 1% reduction aged at 100C for 40 hr; 3 - same with 2% reduction; 4 - same with 3% reduction.

was distorted by cold deformation plays a significant part in strengthening. The second maximum on the stress-strain curve corresponds to the intensive reduction of area and is brought about by the strain aging occurring during the test. Orig. art. has: 3 figures.

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 002/
ATD PRESS: 5107

Card 2/2

MARKO, J.

Economic aspects of the manufacturing processes. : 1957. (Technika : raca. Bratislava. Vol. 9, no. 3, Mar. 1957.)

SO: Monthly List of East European Accessions (MOA) 11, Vol. 6, n. 7, Jul 1957. incl.

MARKO, J.

Calculating dimensions of forest roadbeds by means of the method developed by the Soviet Road Scientific Research Institute. p. 223.

LESNICKY CASOPIS. (Slovenska akademia vied, Bratislava, Czechoslovakia, Vol. 5, no. 3/4, 1959.

Monthly List of East European Accessions (EEA), LC, Vol. 8, no. 11, Nov. 1959
Uncl.

S/081/62/000/021/062/069
B160/B186

AUTHORS: Beseda, V., Marko, J.

TITLE: The present position in the production of viscose fibers

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1962, 494-495
abstract 21P397 (Chem. vlákna, v. 11, no. 4, 1961, 217-230
Slov.)

TEXT: The production of viscose fiber is characterized by improvements in quality for the consumer at a relatively insignificant rise in cost. This applies also to the production of viscose cord. The quality of the cellulose raw material has improved. Super-type fiber characterized by higher strength has appeared on the market. The characteristics of the initial raw material used in the production of the fiber are given, the presence of impurities which have a harmful effect on the quality of the fiber is mentioned, and a comparison is made with the quality of materials previously in use. The technical and economic indices for the production of fiber in different countries (USA, Great Britain, USSR, Czechoslovakia etc.) are compared. The indices of Czechoslovakia and the USSR are also
Card 1/2

The present position in the ...

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B160/B186

compared. Concrete measures needing to be introduced into the production of fiber in Czechoslovakia are indicated. [Abstracter's note: Complete translation.]

Card 2/2

MARKO, Janos

The new four-axle boiler cars of the Hungarian State Railways.
Vasut 12 no.10:15 25 0 '62.

MARKO, Janos, dr.

Cooperation among the socialist airlines. Kozlaked kozl
19 no.48:800-801 1 B '63.

MARKO, Janos

Steam-heated railway cars. Vasut 14 no. 2: 29-30 F '64.

TOBIASZ, Czeslaw, mgr inz.; MARKO, Jerzy, inz.

Magnetoelastic gauges for force and moment measuring in machining processes. Przegł mech 23 no.8:229-232
25 Ap'64.

1. Wykładowca, Katedra Obrobki Skrawaniem, Politechnika Śląska, Gliwice (for Tobiasz).
2. Instytut Metalurgii Żelaza, Gliwice.

L 13465-66 EWT(1)/FS(v)-3 SCTB DD

ACC NR AP6006022

SOURCE CODE: CZ/0053/65/014/004/0282/0282

AUTHOR: Manko, L.; Praslicka, M.

28
B

ORG: Institute of Biology PF Safarik University, Kosice (Biologicky ustav PF UPJS)

TITLE: Effect of interrupted hypothermia² on survival and hematologic changes in mice after irradiation [This paper was presented during Biophysical Days, Brno, 11 Jun 64.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 282

TOPIC TAGS: mouse, radiation biologic effect, hematopoiesis, hypothermia, hematology

ABSTRACT: Male mice receiving 610 r were kept at atmospheric pressure 260 mm Hg for 12 hours daily for 1-6 days, starting 1 hour after irradiation; this prolonged survival from 0 at day 15 to 24% at day 30 also decreased the adverse effect of radiation on leukopoiesis and leukocyte levels. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 002

Card 1/1 DR

MARKO, Laszlo; JAKUCS, Laszlo

Formation of air currents in caves. Hidrologiai közlöny 35
no.4:314-316 Ag'56.

MARKO, L.
Hungarian
Technical Abst.
Vol. 5 No. 4
1953

11. Direct synthesis of alcohols from olefines by carbon monoxide-hydrogen mixtures--Alkoholok közvetlen szintézise olefinekből szénmonoxid-hidrogén gázkeverékkel--J. Berty and L. Marko. (Journal of the Hungarian Chemical Society--Magyar Keimikusok Lapja--Vol. 7, 1952, No. 12, pp. 353-356, 7 figs.)

The oxo synthesis yields aldehydes and, as by-products (especially at higher temperatures), the corresponding alcohols. These alcohols are produced from the corresponding aldehydes by homogeneous catalytic reduction by the action of the cobalt carbonyl $[\text{Co}(\text{CO})_4\text{H}]$ catalyst active at high partial pressures of carbon monoxide. It was established that butyraldehyde was quantitatively transformed at temperatures about 150°C ; starting from cyclohexene, at temperatures between $200-210^\circ\text{C}$, alcohols were obtained amounting to 95 per cent and starting from cracked petrol, above 220°C , amounting to 90 per cent of the final product. At a higher catalyst concentration the reaction rate is higher, respectively, the temperature required for the reaction is lower. The optimal composition of the gas mixture was found to be 65-70 per cent carbon monoxide and 30-35 per cent hydrogen. It is evident that the rate of reduction depends chiefly on the partial pressure of carbon monoxide. This was ascribed to the greater stability of the cobalt carbonyl catalyst.

L. Marko
9-14-54

Marko, L. ~~Marko~~

Direct synthesis of alcohols from olefins with a mixture of carbon monoxide and hydrogen. Modified Oxo process. J. Berty and L. Marko (Hungarian Oil Nat. Gas Research Inst., Budapest, Hungary). *Acta Chim. Acad. Sci. Hung.* 3, 177-82 (1953) (in English). -- The effect of temp. on the catalytic synthesis of alcs. from olefins, CO, and H in a 1-step process was investigated. The reacting materials were heated with Co acetate as catalyst in a rocking autoclave at pressures of 130-200 atm. and temps. of 100-340°. The gas mixt. consisted of 1/3 CO and 2/3 H (by vol.). "Motor spirit" was employed as solvent. The reduction of PrCHO when carried through the process also was studied. The results obtained are shown by tables and curves. Cyclohexene at 200-210° gave a 95% yield; cracked gasoline (24% aromatics, 40% olefins, 30% paraffin-naphthenes) at 220° a yield of 90%. PrCHO at 150-6° was reduced almost completely (but not entirely to BuOH, higher alca. being also formed). Paraffins were not formed in the olefin reductions. The process permits the direct synthesis of alcs. from olefins in a single operation.

W. B. Mathewson

MA
JSH

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MARKO, L.

Preparation of cobaltcarbonylhydride and dicobaltoctacarbonyl. p. 339. Vol 61, no. 11, Nov. 1955. ACTA ZOOLOGICA, ELET ES TUDOMANY, and MAGYAR KEMIAI FOLYOIRAT. Budapest, Hungary.

So: Eastern European Accession. Vol 5, no. 4, April 1956

MARKÓ, L.

33. Production of ethyl alcohol from synthesis gas. I.
Bert. I. Markó, D. Kalló. Magyar. Kémiai
Folyóirat. Vol. 62, 1958, No. 3, pp. 04-102, 6 figs.,
10 tabs.

Methyl alcohol was treated in the liquid phase using cobalt catalyst (cobalt acetate) and iodine promoter (iodine or methyl iodide) with synthesis gas (containing 60-80% carbon monoxide and 20-40% hydrogen) at about 200° C and conversions into C₂ compounds attained 70-80%. Based on the experimental findings it was concluded that the conversion rate i. e. the formation of the C₂ compounds could not be increased above a certain limit by increasing the amount of catalyst added (optimal conditions were reached by employing about 5% by weight cobalt acetate and 2.5% by weight iodine). The reaction product contained almost identical amounts of acetic acid and ethyl alcohol and small quantities of acetaldehyde and higher alcohols. The reaction product was noncorrosive since the bulk of the acetic acid was present in the ester form thus the experiments could be conducted conveniently in a stainless steel (18-8 chromium nickel steel) apparatus. Methyl alcohol was converted into acetic acid in aqueous solution with pure carbon monoxide gas in the presence of large amounts of iodine. The conversion attained 80% if a reaction mixture consisting of 82 ml methyl alcohol, 125 ml water, 6.2 g cobalt acetate and 9.6 g iodine was treated at 230-250° C and 230-250 atm pressure with a gas composed of 90% carbon monoxide and

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Berty, J.; Marko, L. . .

8% hydrogen. The reaction product obtained was 30% aqueous acetic acid solution which contained methyl alcohol, methyl acetate, cobalt salts and iodine in small amounts. However under these experimental conditions the stainless steel apparatus employed was severely corroded.

PM 2/2
MT

No. 1074 : ROKHAM., No. 21, 1959, No. 75697
 Authors : Bertz, J., Cstay, E., and Marko, L.
 I. : not given
 Title : The Synthesis of Octyl Alcohol from Cracked Gasoline Fractions, Carbon Monoxide, and Hydrogen
 Ref. : Chem Tech., No. 5, 285-286 (1957)

ABSTRACT : Equilibrium conditions for the formation of Co-carbonyl from metallic Co and CO gas within technologically acceptable temperature limits have been investigated in laboratory scale equipment, and the partial pressure of CO required for the direct synthesis of alcohols with thermodynamically stable carbonyl catalysts was determined. It was found that the principal side products of the oxo-synthesis and of the direct synthesis of alcohols are acetals, which are

PAGE: 1/2

205

COUNTRY : USSR H-15
CATEGORY :

ABS. JOUR. : Khim., 5, 81 1957, 10. 75657

AUTHOR :
TITLE :

ORIG. PUB. :

ABSTRACT : Decomposed under the conditions of the catalytic
reaction and high-boiling reaction.
A simple kinetic equation is proposed for the
determination of the rate of the reaction in
the synthesis of aldehydes (oxo process).
B. Fabrichtny

DATE: 2/.

~~LAST~~ MARKO, L.

1
 Direct synthesis of acetyl alcohol from cracked gasoline
 (Laska, Marko, *Novor. Kém. Lapok*, 13, 195-2 (1958)).
 The reaction was carried out by 1-step synthesis from the C
 fraction of cracked gasoline at 100-150°C, 100-200 atm., CO
 (con. cracked gas) and in the presence of 1-1 mole % of Cu
 separate based on the olefin content. By increasing the CO
 content of the gas phase, max. reduction (approx. 80-85%)
 was obtained at a 60-70% CO content. Temp. increase
 was advantageous for the aldehyde reduction. The effect
 of $\log K_p$ of $C_2H_5CO_2H$ was studied. The free-energy change
 of 1 formation was expressed by $\Delta G^\circ = -109,000 + 310.7$
 cal./mole. To maintain a 0.16 mole % concn., the necessary
 CO partial pressures were 100° at 1, 120° at 90, 210° at
 185, 220° at 280, and 240° at 420 atm., resp. Further
 expts. carried out at 800 atm. pressure, with 100-20 atm.
 CO partial pressure, gave alc. yields of 94% in 2 hrs. The
 formation of the by-product acetal was studied on the model
 of hexahydrobenzaldehyde and 2-ethylhexanal. The equil.
 const. of acetal formation was $\log K = (1010/T) - 2.18$.
 H. M. Palmer

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 4/2/58

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 99

MARKO, LASZLO

Infrared spectrum of dicobaltcarbonyl. G. Bor and L. Markó (Hungarian Oil and Gas Research Inst., Veszprém). *Spectrochim. Acta* 1959, 14:7-8.—The spectra were obtained with a prism of LiF. The principal absorption max. were 2070, 2060, 2044, 2032, 2024, 1869, and 1860 cm^{-1} . There are weaker bands at 2112, 2003, 1983, and 1834 cm^{-1} . The results suggest a cis transfiguration of $\text{Co}_2(\text{CO})_8$. George M. Murphy

Stability and dissociation of cobalt carbonyl. Laszlo Markó and Otto Budavári (Magyar Ásványolaj és Földgáz Kísérleti Int., Veszprém, Hung.). *Magyar Tudományos Akad. Kém. Tudományok Osztályának Közleményei* 11, 411-17(1959).—The disocn. of $\text{Co}_2(\text{CO})_8$ is detd. in the catalytic synthesis of alcs. (Co and Co stearate catalysts) from olefins in the presence of CO and H at $200 \pm 5^\circ$ and 60-100 atm. partial pressure. The concn. of $\text{Co}_2(\text{CO})_8$ is detd. with a Pulfrich photometer from aliquots withdrawn during the course of the reaction and from the product. Also the aldehyde concn. was detd. with $\text{NH}_2\text{OH}\cdot\text{HCl}$ and alc. concn. with $\text{C}_6\text{H}_5(\text{CO})_2\text{O}$ (% redn. and % olefin conversion). The disocn. of $\text{Co}_2(\text{CO})_8$ to Co in pure hydrocarbon soln. is a slow reaction but is speeded up by the presence of the disocn. products of the olefins and metallic Co. T. E. Muller

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4E2C (7)
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Marko, L.; Budavari, O.; Gorcey, F.

A continuous high-pressure laboratory installation. p.301

MAGYAR KEMIKUSOK LAPJA. (Magyar Kemikusok Egyesulete)
Budapest, Hungary. Vol.14, no.8, August 1959

Monthly List of East European Accessions (EEAI) LC, Vol.8, no.11
November 1959
Uncl.

MARKO, Láslo

Reduction of olefins to saturated hydrocarbons under conditions
of synthesis. Khim.i tekhn.topl.i masel 5 no.9:19-20 S '60.

(MIRA 13:9)

1. Vengerskiy nauchno-issledovatel'skiy institut nefti i prirodnogo
gaza.

(Olefins)

(Hydrocarbons)

(Oxo process)

MARKO, Laszlo; BUDAVARI, Otto

Stability and decomposition of cobalt carbonyls. II. Stability relations of cobalt carbonyls under the reaction circumstances of direct alcohol synthesis. Kem tud kozl MTA 13 no.2:153-161 '60.
(EEAI 9:8)

1. Magyar Asvanyolaj es Foldgaz Kiserleti Intezet, Budapest-Veszprem.

(Cobalt carbonyls) (Alcohols)

MARKO, Laszlo; SZABO, Pal

Stability and decomposition of cobalt carbonyls. III. Removal of cobalt from the reaction products containing cobalt carbonyls during the direct alcohol synthesis by means of heat decomposition. Kemtud kozl MTA 13 no.2:163-172 '60. (EEAI 9:8)

1. Magyar Asvanyolaj es Foldgaz Kiserleti Intezet, Budapest-Veszprem.

(Cobalt carbonyls) (Alcohols) (Cobalt)

MARKO, Iaszlo; ALMAJY, Bedeon; BENEZYVARY, Pal

Examination of the coloration of diisooctylphthalate by means of mathematical statistics as a method of evaluation; the effect of isooctyl alcohol impurities on the colorfulness of diisooctylphthalate. Magyar kem lap 15 no.2:62-65 F '60.

1. Magyar Asvanvolaj es Fold gazkiserleti Intezet.

MAP

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MARKO, Laszlo

Homogeneous catalytic hydrogenations by cobalt-carbonyl catalysis.
Kem. tud. kozl. MTA 18 no. 4:563-570 '62

1. Magyar Asvanyolaj es Földgaz Kiserleti Intezet, Veszprem

FREUND, Mihaly, prof., dr., ing. (Budapest IX, Papay Istvan u.10);
MARKO, László, dr., ing. (Budapest IX, Papay Istvan u.10);
LAKI, Janos, dipl.ing. (Budapest IX, Papay Istvan u.10)

Applications of olefins from the mineral oil industry in
oxosynthesis. Acta chimica Hung 31 no.1/3:77-84 '62.

1. Ungarisches Erdöl und Erdgas Forschungsinstitut, Veszprem-
Budapest. 2. Editorial Board member "Acta chimica Academiae Scien-
tiarum Hungaricae" (for Freund).

MARKO, Laszlo, dr.; SZABO, Pal

Development and industrial application of oxo synthesis in
the world. Magyar kem lap 18 no.10:461-469 0'63.

1. Magyar Asvanyolaj es Foldgazkiserleti Intezet, Veszprem.

KHATTAB, Samir A. (Veszprem, Magyar Tudós Akadémia); MANN, Laszlo, Jr.
(Veszprem, Magyar Tudós Akadémia)

behavior of organic sulphur compounds under the conditions
of oxy synthesis. *Acta Chimica Hung* 40 no.4:471-473 1964.

1. Hungarian Oil and Gas Research Institute, Veszprem.

I. 34720-66 EWP(j)/EWP(t)/ETI IJP(c) JD/HW/RM
ACC NR: AT6025200 SOURCE CODE: HU/2502/65/046/003/0247/0254

AUTHOR: Laky, Janos—Laki, Y.; Szabo, Pal—Sabo, P.; Marko, Laszlo (Doctor) 37

ORG: Hungarian Research Institute for Petroleum and Natural Gas, Veszprém B+1

TITLE: Hydrogenation¹ of aldehydes with cobalt carbonyl catalysts. Poisoning of the catalyst by various sulfur compounds 27

SOURCE: Academia scientiarum hungaricae. Acta chemica, v. 46, no. 3, 1965, 247-254

OPIC TAGS: hydrogenation, aldehyde, cobalt compound, organic sulfur compound

ABSTRACT: The sulfur-containing compounds investigated inhibited the catalytic hydrogenation of aldehydes in the following order of increasing effectiveness: saturated thioethers ~ thiophene < tetrahydrothiophene << ethyl thioacetate < allyl thioether ~ butyraldehyde-diethylmercaptal < ethylmercaptane ~ diethyl sulfide ~ thiophenol << carbon disulfide. The inhibiting effect was attributed to the formation of cobalt sulfide. The degree of inhibition decreased with increasing catalyst concentration.

Fig. art. has: 2 figures and 2 tables. [Orig. art. in German.] [JPRS: 34,165]

IB CODE: 07 / SUBM DATE: 07Jun65 / ORIG REF: 005 / OTH REF: 017

nd 1/1

MARKO, M

Marko, M.: Organická chemia. Bratislava: Státní
nauk. techn. lit. 1955. 841 pp. Kčs 82.20. Reviewed in
Chem. Listy 50, 1344-6(1956).

288

PM

KUBIK, Stefan; MARKO, Milos

Ultrasonics, their use and their effect on the human organism.
Pracovni lek. 12 no.6:308-313 J1 '60.

1. Ustav hygieny prace a chorob z povolania v Bratislave, riaditel
MUDr. I. Klucik.
(ULTRASONICS)

MACHO, Vendelin, inz., C.Sc.; MARKO, Milos, prof., dr., inz.; CIHA, Miloslav,
RNDr.

Effect of acetylene and some of its homologues on oxosynthesis.
Chem zvesti 15 no.1/12:830-838 N-D '61.

1. Vyskumny ustav pre petrochemiu v Novakoch. Authors' address:
Novaky, Vyskumny ustav pre petrochemiu.

MACHO, Vendelin, inz., C.Sc. (Novaky); MARKO, Milos, prof., dr., inz.
(Novaky); CIHA, Miloslav, RNDr. (Novaky)

Changes of acetals and esters in oxo synthesis. Chem zvesti
16 no.1/2:65-72 Ja-F '62.

1. Vyskumny ustav pre petrochemiu, Novaky.

MARKO, M.E.; SIRYK, G.V.

Standard program for approximate conformal mappings of doubly
connected regions. Dokl. i soob. Uzndk. Ser. fiz.-mat. i tekhn.
nauk no.5:101-103 '62. (MIRA) 1969

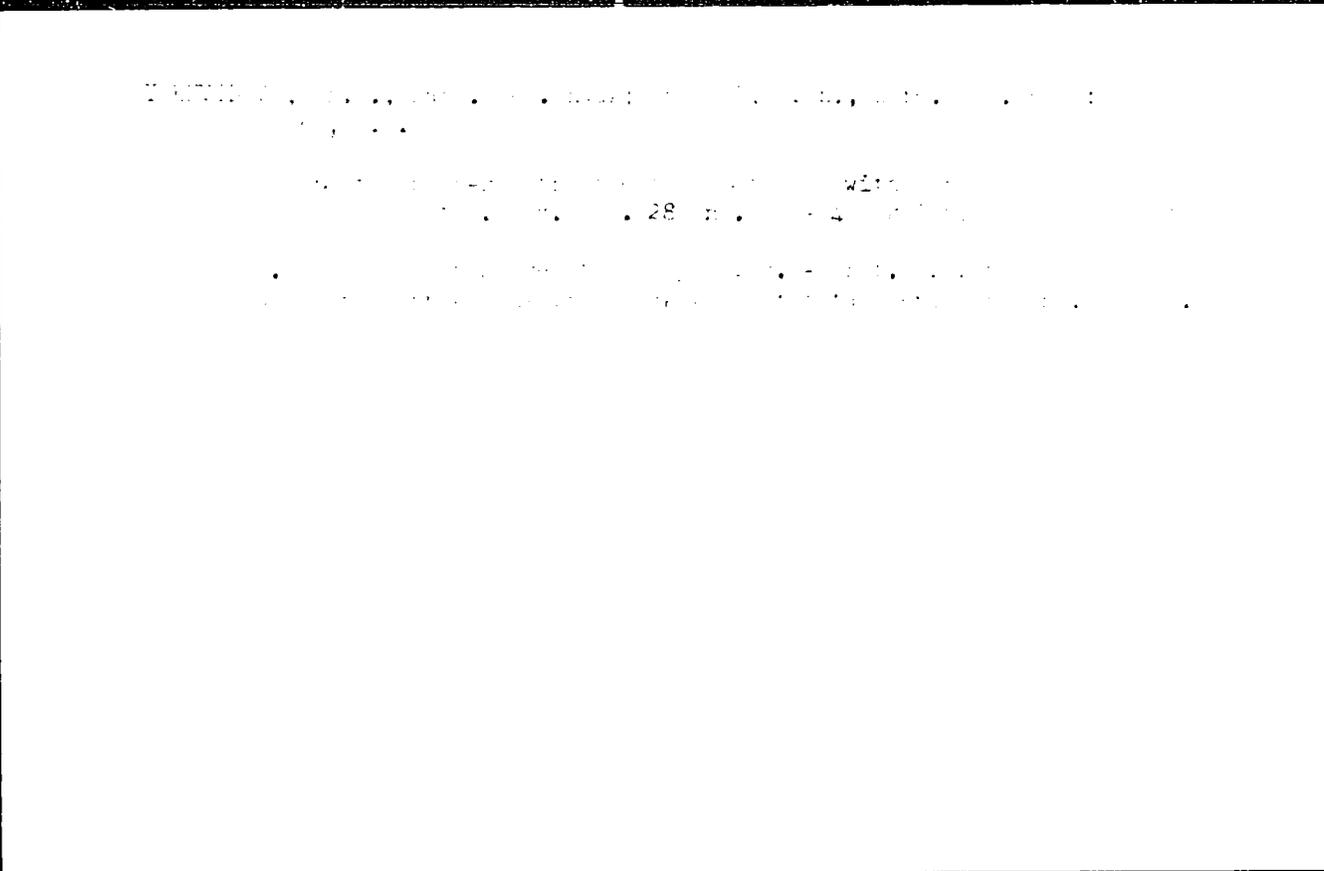
MARKO, D.F.; KOHNEN, T.R.; YUEN, J. W., "et al."

Intestinal microflora in nonspecific ulcerative colitis. Preliminary report. Zhur. mikrobiol., epid. i immunit. 43 (1966) 78-81 (Jan 1966). (Sov. Med. J. 1966)

1. Nauchno-issledovatel'skaya laboratoriya po proktologii i klinika Ministerstva zdravookhraneniya SSSR na baze Geroevskoy bol'nitsy No. 67. Submitted April 3, 1966.

MAREC. U.S. ...

[Faint, illegible handwritten text]



P. MARKC

"Treatment of young trees in the area of the State Forest Management Palarikovo."
p. 53. "Dendrometric and locational registration of experimental areas as an
important part of overall forestry research." p. 50. (POLANA, Vol. 9, no. 3,
Mar. 1953, Praha, Czechoslovakia.)

SC: Monthly List of East European Accessions, L.S., Vol. 2 No. 7, July 1953, Encl.

NIEDERLAND, T.R.; KOVACS, P.; DZURIK, R.; HOSTYN, L.; MARKO, P.

Dynamic changes of liver lipid fractions following the administration of massive doses of salicylates. Cas.lek.cesk. 99 no.3/4:98-101 22 Ja '60.

1. III. interna klinika lekárskej fakulty UK v Bratislave, prednosta prof.dr. T.R. Niederland. Katedra chemie-biochemie farmaceutickej fakulty UK v Bratislave, prednosta prof.dr. Ludovit Krasnec.

(LIVER metab.)

(LIPIDS metab.)

(SALICYLATES pharmacol.)

CZECHOSLOVAKIA

Ivan PECHAN and Peter MARKO, Department of Biochemistry, Faculty of Medicine, Comenius University, Bratislava (Biochemický ústav Lekárskej fakulty Univerzity Komenského) Bratislava.

"Free Nucleotides of Nervous Tissue. Part 3. Free Nucleotides of Guinea Pig Brain and Liver."

Bratislava, Biologia, Vol 18, No 5, 1963; pp 377-384.

Abstract [English article]: Modified linear gradient elution after Dowex 1 column chromatographic separation, as formates. Most nucleotides in liver paralleled those in brain, both quantitatively and qualitatively. Adenosine and guanosine triphosphates predominated in both organs over the mono- and diphosphates. Present methods are considered inadequate to determine in vivo patterns. Two column chromatograms, 2 tables; 2 Czech (1 unpublished), 1 Polish and 24 Western references.

1/1

PEKHAN', I. [Fechan, I.]; MARKO, P.

Determination of free nucleotides in nerve tissue. Biokhimiia 29
no.3:408-412 My-Je '64. (MIRA 15:4)

1. Kafedra biokhimiia meditsinskogo fakul'teta Universiteta imeni
Komenskogo, Bratislava, Chekhoslovakiya.

L 14827-66

23
B

ACC NR: AP6008341

SOURCE CODE: CZ/0049/65/000/003/0165/0172

AUTHOR: Pechan, Ivan--Pekhan', I. (Graduate physician; Bratislava); Marko, Peter. (Graduate physician; Bratislava); Sajter, Vit--Shayter, V. (Engineer; Bratislava)

ORG: Department of Biochemistry, Medical Faculty, Comenius University, Bratislava

TITLE: Free nucleotides in some tissues of guinea pigs

SOURCE: Biologia^{AD}, no. 3, 1965, 165-172

TOPIC TAGS: experiment animal, chromatography, solvent extraction, acetone, biochemistry, chlorocarboxylic acid, phosphate ester, nucleic acid

ABSTRACT: Free nucleotides were determined chromatographically on Dowex 1x8 column; the origin of the nucleotides was brain, liver, kidney, spleen, heart, and skeleton muscle of guinea pigs. Extraction of tissue in acetone solution of trichloroacetic acid at -70°C suggested by Minard and Davis for brain tissue is suitable also for the other tissues investigated. There are substantial differences in the contents of individual nucleotides in the investigated organs. Edita Pechanova provided technical assistance throughout this work. Orig. art. has: 1 figure and

Card 1/2

2

L 14827-66

ACC NR: AP6008741

3 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 07Nov64 / ORIG REF: 001 / OTH REF: 019
SOV REF: 001

FW
Card 2/2

L 1045-66 EWT(1)/EWA(j)/EWT(m)/EWA(b)-2 RM/JK

ACCESSION NR: AP5026089/

CZ/0049/65/000/007/0529/0536 35

AUTHOR: Pechan, Ivan (Pekhan', Ivan)(Doctor of medicine, Candidate of sciences) 36
(Bratislava); Marko, Peter (Doctor of medicine)(Bratislava) B

TITLE: Nucleic acids and nucleotides in experimental allergic encephalomyelitis I. Free nucleotides in the brain and the liver of guinea pigs with experimental allergic encephalomyelitis

SOURCE: Biologia, no. 7, 1965, 529-536

TOPIC TAGS: biochemistry, brain, liver, nervous system disease, experiment animal

ABSTRACT: [Authors' English summary modified 7]: Content of free nucleotides in the brain and liver of guinea pigs suffering from a clinically apparent form of experimental allergic encephalomyelitis was determined by ion-exchange chromatography. The disease was induced by 2 intradermal injections containing lyophilized guinea pig spinal cord and brain, autoclaved and dried Mycobacterium tuberculosis, paraffin oil, and water. The disease caused an increase in the content of free nucleotides in the brain

Card 1/2

L 1045-66

ACCESSION NR: AP5026089

(mainly in a fraction containing predominantly uridine diphosphate glucose); in the liver a decrease in free nucleotides was found. The decrease was caused even in healthy animals injected with the same material as the disease-inducing mixture, but free of the brain and spinal cord tissue. Orig. art. has: 2 graphs, 2 tables.

ASSOCIATION: Department of Biochemistry, Medical Faculty, Komenky University, Bratislava

SUBMITTED: 30Jan65

ENCL: 00

SUB CODE: LS

NR REF SOV: 000

OTHER: 017

JPRS

Card 2/2

LEHOTAN, O.; HASIK, A.; PECHAN, I.; MARKO, P.

The mechanism of the anaphylactic reaction of the actomyosin fiber. Bratisl. lek. listy 45 no.9:523-533 15 My'65.

1. Katedra internéj medicíny I. Lekárske fakulty Univerzity Komenského v Bratislave (veduci: prof. MUDr. M. Ondrejicka); Katedra experimentálnej patológie a farmakológie Lekárske fakulty Univerzity Komenského v Bratislave (veduci: doc. MUDr. E. Barta, CSc.) a Katedra biochemie Lekárske fakulty Univerzity Komenského v Bratislave (veduci: doc. MUDr. T. Tursky, CSc.).

MARKO, S.

"Control of operational efficiency of hydro-electric-power stations."

ENERGETIKA, Praha, Czechoslovakia, Vol. 8, no. 8, August 1958

Monthly List of East European Accessions Index (EEAI), Library of Congress,
Vol. 8, no. 8, August 1959

Unclassified

MARKO, S. [Marko, S.]; KHADUSHFALVI, I. [Hadusfalvi, I.];
ENZHEL, D. [Enzsol, G.]

Some problems relating to ferrite isolators. Acta techn
Hung 42 no.1/3:163-170 '63.

1. Nauchno-issledovatel'skiy institut svyazi, Budapesht.

MARKO, Stefan, ins.

Accuracy control of the rotary capacitors with air dielectric.
Slaboproudy obsor 24 no.2:99-102 F '63.

1. Urad pre normalizaciu a meranie, Bratislava.

MARKO, Stefan inz., CSc.

Control laboratories for verification of electric measurement
apparatus and standard measures. Elektrotechnik 13 no.8:
223-226 Ag '63.

1. Urad pro normalizaci a mereni, KO, Bratislava.

MARKO, Szilardne, tudományos munkatárs

Phonocardiograph(PKG). Meres automat 9 no.1:23-28 Ja '61.

1. Muszeripari Kutató Intézet

MARKO, V.

"Acceleration of the Turnover of Woods in Storage Plants." p. 233 (POLANA, Vol. 9, No. 10, Oct. 1953) Praha, Czechoslovakia

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

L 37727-65 EWT(m)/EWA(d)/EWP(t)/EWP(k)/EWP(b)/EWA(c) Pf-4 MJW/JD/HW
s/0122/65/000/003/0065/0067 2A

ACCESSION NR: AP5008255

AUTHOR: Marko, Y. (Engineer); Bernshteyn, M. L. (Doctor of technical sciences, Professor)

TITLE: Thermomechanical treatment by forging

SOURCE: Vestnik mashinostroyeniya, no. 3, 1965, 65-67

TOPIC TAGS: thermomechanical treatment, high temperature thermomechanical treatment, die forging, thermomechanically treated steel property/50KhFA steel

ABSTRACT: The effect of high-temperature thermomechanical treatment (HTMT) on the properties of 50KhFA steel has been investigated. Steel specimens ranging from 7 x 6 to 10.5 x 6 mm or 7.1-8 mm in diameter were heated to 900C, die forged in a high-speed press, oil quenched, and then tempered at 200C for 2 hr. Forging was done with two strokes (one stroke was found to produce a very nonuniform deformation and no significant strength increase) with reduction λ ranging from 51 to 120% ($\lambda = \ln(h_0/h_1)100$, where h_0 and h_1 are the heights of the specimen before and after deformation). It was found that depending upon the degree of reduction and the shape and size of the specimens, tensile strength varied from 220.5 to 232.7 kg/mm², yield strength from 191 to 203 kg/mm², and reduction of area from 28.2 to 36%

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L 37727-65

ACCESSION NR: AP5008255

compared to 216.2 kg/mm², 177 kg/mm², and 41.7% for conventionally heat-treated specimens. The strengthening effect of HTMT by forging depends not only upon reduction, but also upon the uniformity of deformation. The highest mechanical properties were obtained in narrow specimens because the effect of friction and, consequently, the nonuniformity of deformation in wide specimens is more pronounced. Orig. art. has: 4 tables and 4 figures. [ND]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, IE

NO REF SOV: 000

OTHER: 000

ATD PRESS: 3224

Card 2/2 *RS*

L 1334-66 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWA(c) MJW/JD

ACCESSION NR: AP5022404

UR/0369/65/000/004/0473/0476

AUTHOR: Marko, Y.; Bernshteyn, M. L.

58
36
3

TITLE: Strengthening of thermomechanically worked 55KhFA steel by means of cold deformation of martensite

SOURCE: Fiziko-khimicheskaya mekhanika materialov, no. 4, 1965, 473-476

TOPIC TAGS: material deformation, martensite, thermomechanical property, steel/55KhFA steel

ABSTRACT: The effect of cold deformation of martensite on mechanical properties of thermomechanically worked steel was studied on 55KhFA steel samples. The 55KhFA steel composition was 0.50% C, 0.65% Mn, 0.25% Si, 1.28% Cr, 0.17% V, 0.02% P, and 0.02% S. The 0.8 ton ingots were tempered at 700°C for 2 hours and cut. The hardening was carried out by means of heating to 870°C, quenching in oil, and tempering for 2 hours at 200°C. The high temperature thermal working was conducted as follows: austenization at 900°C in a furnace was followed by quenching in oil, forging into bars with 5.4 mm in diameter, tempering for 2 hours at 200°C, and grinding to 4 mm in diameter. Samples with 4 mm in diameter and 40 mm in length were deformed

Card 1/3

L 1334-66

ACCESSION NR: AP5022404

by stretching on a "Mor and Federgaf" tensile testing machine. The degrees of martensite deformation were 0, 0.6, 1, 2, and 3%. After deformation, samples were either tempered for 2 hours at 200°C or not tempered. The dependence of mechanical properties, endurance limit σ_b , proportionality limit $\sigma_{0.02}$, and braking elongation ψ , of quenched and deeply/tempered 55KhFA steel samples upon the degree of martensite deformation are shown in fig. 1 of the Enclosure. In general, cold working was observed to have a beneficial effect on the mechanical properties of 55KhFA steel. Orig. art. has: 2 figures, 3 tables. 2

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys)

SUBMITTED: 11Mar65

ENCL: 01

SUB CODE: MM

NO REF SOV: 003

OTHER: 004

Card 2/3

L 1334-66

ACCESSION NR: AP5022404

ENCLOSURE: 01

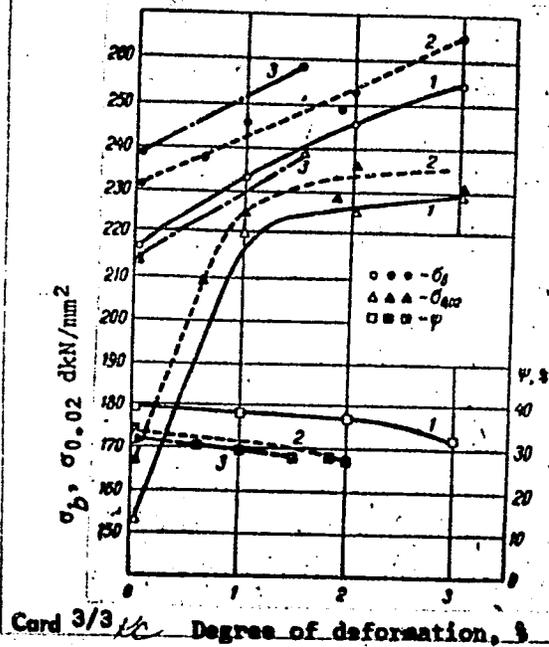


Fig. 1. 1--conventional quenching and tempering for 2 hours at 200°C; 2--high temperature thermomechanical working followed by tempering for 2 hours at 200°C; 3--high temperature thermomechanical working followed by cold working and tempering for 2 hrs. at 200°C.

2506

S/032/61/027/007/007/012
B110/B203

15.2610

AUTHORS: Drobizvskiy B. A. Markoshev V. M., Polishchuk, T. V. and
Fridman, Ya. B.

TITLE: Method of determining the rate of brittle destruction of
conductors

PERIODICAL: Zavodskaya laboratoriya v. 27 no. 3. 1961 888-894

TEXT: In samples with previously applied notch Ye. A. Kuznetsov and V. I.
Pukh (Ref. 5) Sb. "Nekotoryye problemi, sverkhprochnost' i veroyatnost'" 1961
AN SSSR, str. 367 found a decrease in the rate of destruction with
decreasing mean stresses at an industrial glass strength of < 0.1 . The
present paper describes a method of estimating the rate of destruction and
gives test results of concentrated bending of organic glass samples with
differently sharp notches and large bottom radii of the latter. Thus a
large reserve in elastic energy was obtained before destruction of 1 mm wide
and 2-3 μ thick silver strips etched on in vacuo with the aid of a template
were used for measuring the rate. Current was applied to way of two
textolite contacts with spring laminae. Tests were made with 10 mm distance

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25635

S/039/81/027/007/007/001
B110/B103

Method of determining the rate of

between points of support in an $AK-1A$ (IM 4A) machine with 0.48 mm pitch yielding
 The first Ag strip situated in the top below the machine is shunted with the
 resistor R_0 (Fig. 2). R_0 and R_1 constitute the voltage divider connected
 with a 180-v battery. Before breaking, the voltage in A is set equal to R_0
 is switched on and the voltage rises suddenly to 180 v. $R_1 \gg R_0$. It excites
 the oscillator tube with shock excitation and excites the generator. Hence
 the voltage passes over the delay line $3L3-L2$ to the first plate
 pair of the double triode $6AK6$ (6AK6) still strip OK (IM 4A) (IM 4A). Breaking of
 the tube produces on its anode a positive pulse which passes over the
 delay line to the oscilloscope with alternating current (AC) from the
 shock excitation generator ПУВ (GIV) the oscilloscope shows a sinusoid.
 When the second Ag strip breaks R_0 is switched on which like every further
 strip rupture, reduces the sinusoid amplitude. When the last strip breaks
 no sinusoidal voltage arrives at the oscilloscope. The photographs were
 shot by a Зоркий С (Zorkiy S) apparatus with Юпитер 3 (Jupiter 3) objective lens
 (light intensity $\tau : 1.5$) with diaphragm $\tau : 2.8$ and plates with 290 or
 350 ГОСТ (GOST) units. The course of cracking was determined according to
 Fig. 3. Its mean recording velocity between two strips was the distance l
 divided by the time between the fracture of two adjacent strips obtained by

Card 2/6

25636

S/032/61/027,007,007,012
B110/B203

Method of determining the rate of ...

counting the sinusoid peaks of the individual oscillogram steps. The authors examined polymethyl methacrylate samples of the types "C" ("S"), "X" ("Kh") (dimensions: 10·40·70 mm) and "T" ("T"). The 4-5 samples of each type hardened at first at 110-150°C were split by varying load on a resonance vibrator (1500 cps), and hardened at 70-105°C for 30-60 min. On 10·10·38 mm "S" samples with 2 mm deep notches, the authors studied the effect of notch sharpness and size of samples on the rate of destruction. The destruction stress and the maximum destruction rate decrease with increasing notch sharpness. The maximum destruction rate becomes more constant. Also the velocities obtained by graphical differentiation of the distance-versus-time curves become more uniform. For split samples, they are almost constant, for unsplit samples, they drop from 700 to 300 m/sec. Samples without a notch show the greatest roughness of fracture, those with a notch of 2 mm radius show lower roughness, those with a notch of 1 mm radius, the lowest one. The zone adjacent to the fatigue split has nearly fibrous structure with numerous crack traces propagating in parallel to each other from many centers. The principal zone is completely smooth. Since the velocity of this fracture is much lower than the final velocity, the measurement should be made with a film (32 frames per second). The Card 3/6

25636

Method of determining the rate of ...

S/032/61/027, 007, 007, 012
B110/B203

following process is observed: (I) sudden destruction; (II) increasing velocity (incubation period: 3-4.5 mm in 0.36-2 sec); (III) linear increase (30-50 mm/sec). The fibrous-structure fracture changes to smooth fracture. After 10,000-fold, sudden increase, $v_{max} = 250-270$ m/sec is attained with subsequent decrease. Thus, the maximum destruction rate, v_{max} , depends on the notch sharpness determining the destruction stress. A stress increase from 2.14 to 11.3 kg/mm² raises v_{max} from 245 to 684 m/sec. The propagation rate of longitudinal elastic vibrations in polymethyl methacrylate is 1640 m/sec. v_{max} for samples without a notch is 0.416 of this value, in tension tests, it is 0.55, for samples with a notch, 0.132. Thus, a destruction rate of 0.55 of the sonic velocity was obtained whereas former measurements established 0.33 for silicate glass. In elongation, the whole deformable length contributes to acceleration, in bending, the volume adjacent to the notch. An increase of the reserve in elastic energy showed little effect on the rate of destruction. An increase in dimensions under equal conditions (also of the notch) showed a high effect. An increase in the moment of resistance ($bh^2/6$) from 187 to 3,000 mm³ effected

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25636

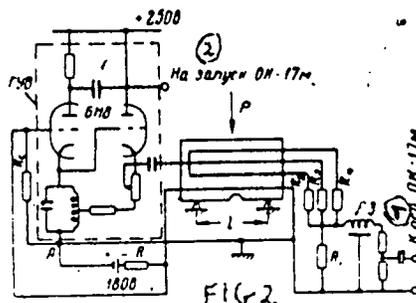
S/032/61/027/007/007/012
B110/B203

Method of determining the rate of ...

an increase of v_{max} from 231 to 513 m/sec. The authors thank Yu. A. Bulanov for assisting in the development of apparatus. There are 12 figures, 1 table and 9 references: 3 Soviet-bloc and 5 non-Soviet-bloc. The most important reference to English-language publications reads as follows:
 Ref. 4: H. Schardin. Fracture, Proc. of an Intern. conference on the Atomic Mechanisms of Fracture, Swampscott, Mass., Apr., John Wiley and Sons, p. 297 (1959).

Fig. 2. Circuit diagram of the apparatus for determining the rate of destruction of non-conductors.

Legend: (1) to the OK-17M,
 (2) to the input of the OK-17M.



Card 5/6

L 41278-65 EWT(m)/EWP(w)/EWA(d)/EPR/T/EWP(t)/EWP(b) Ps-4 IJP(c) JD
ACCESSION NR: AP5007677 S/0032/65/031/003/0345/0349

AUTHOR: Markochev, V. M.; Drozдовskiy, B. A.

20
B

TITLE: Method of evaluating the rate of crack propagation and obtaining a given stress in repeated loading 16

SOURCE: Zavodskaya laboratoriya, v. 31, no. 3, 1965, 345-349

TOPIC TAGS: crack propagation, propagation rate determination, constant true stress test, crack propagation rate

ABSTRACT: A method and equipment for automatically recording the crack growth in sharp-notched specimens under conditions of cyclic stressing have been developed. The unit makes it possible to control the load and to maintain a constant true stress in the specimen being tested. The unit incorporates an eddy current sensor for tracking the end of a developing crack. D16 aluminum alloy [US 2024] sheets 1.5 mm thick, solution heat treated and naturally aged for 6 months (D16T) or artificially aged at 190C for 12 hr (D16T1), were tested. The specimens had a central hole 2 mm in diameter with slots 12 mm long and 0.3 mm wide. The test results showed that with an

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L 41278-65

ACCESSION NR: AP5007677

arbitrary critical rate of crack propagation of 0.01 mm/cycle, D16T alloy is much stronger than D16T1 (see Fig. 1 of the Enclosure). In tests under a constant load at an initial stress of 25 kg/mm², the specimens failed after 170 cycles. In a test under a constant stress of 25 kg/mm² a crack propagation rate of 0.11 mm/cycle was reached after 200 cycles. When the crack length reached 12 mm, this propagation rate remained constant for an additional 350 cycles, whereupon the crack grew to 50 mm. Extrapolation of the data showed that the specimen would have failed after 950 cycles. Thus, the described method makes possible testing under a given mean stress. Testing under a constant stress is particularly interesting in that a test for a small number of cycles may yield a constant characteristic for a material of a given thickness. Orig. art. has: 4 figures. [MS]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: MM, AS

NO REF SOV: 004

OTHER: 005

ATD PRESS: 3224

Card 2/3

L 41278-65

ACCESSION NR: AP5007677

ENCLOSURE: 010

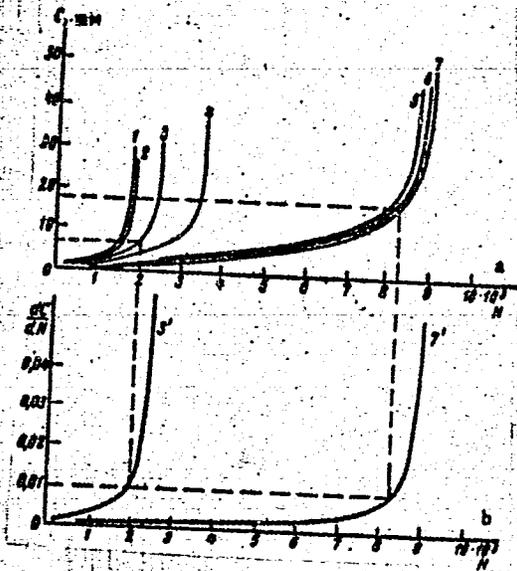


Fig. 1. Dependence of the crack length (a) and crack propagation rate (b) on the number of cycles under a constant stress

Curves 1—4 - D16TI alloy;
curves 5—7 - D16T alloy.

Card 3/3 *me*

ACC NR: AP7001448

(A)

SOURCE CODE: UR/0413/66/000/021/0184/0184

INVENTORS: Omirov, V. S.; Krivovvaz, R. M.; Shteynberg, A. S.; Markochov, V. N.;
Dvurechenskiy, N. I.

ORG: none

TITLE: A combustion chamber of an automobile gas turbine engine. Class 46, No. 188221 /announced by Central Scientific Research Institute of Automobiles and Automobile Engines (Tsentral'nyy nauchno-issledovatel'skiy avtomobil'nyy i avtomotorny institut)]

SOURCE: Izobreteniya, promyshlennyye obraztzy, tovarnyye znaki, no. 21, 1966, 184

TOPIC TAGS: automotive industry, gas turbine, turbine engine, gas turbine engine, combustion chamber

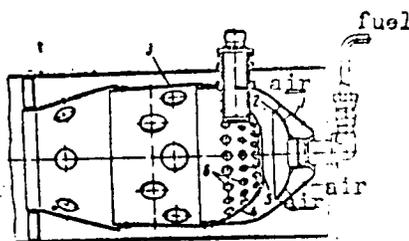
ABSTRACT: This Author Certificate presents a combustion chamber of an automobile gas turbine engine. The chamber contains a head with a stabilizer and a fire tube (see Fig. 1). To improve the process of mixture forming, a spherical diaphragm with a main central opening and with several auxiliary openings on the periphery of its surface is placed in the head of the chamber between the stabilizer and the fire tube.

Card 1/2

UDC: 621.438.056

ACC NR: AP7001448

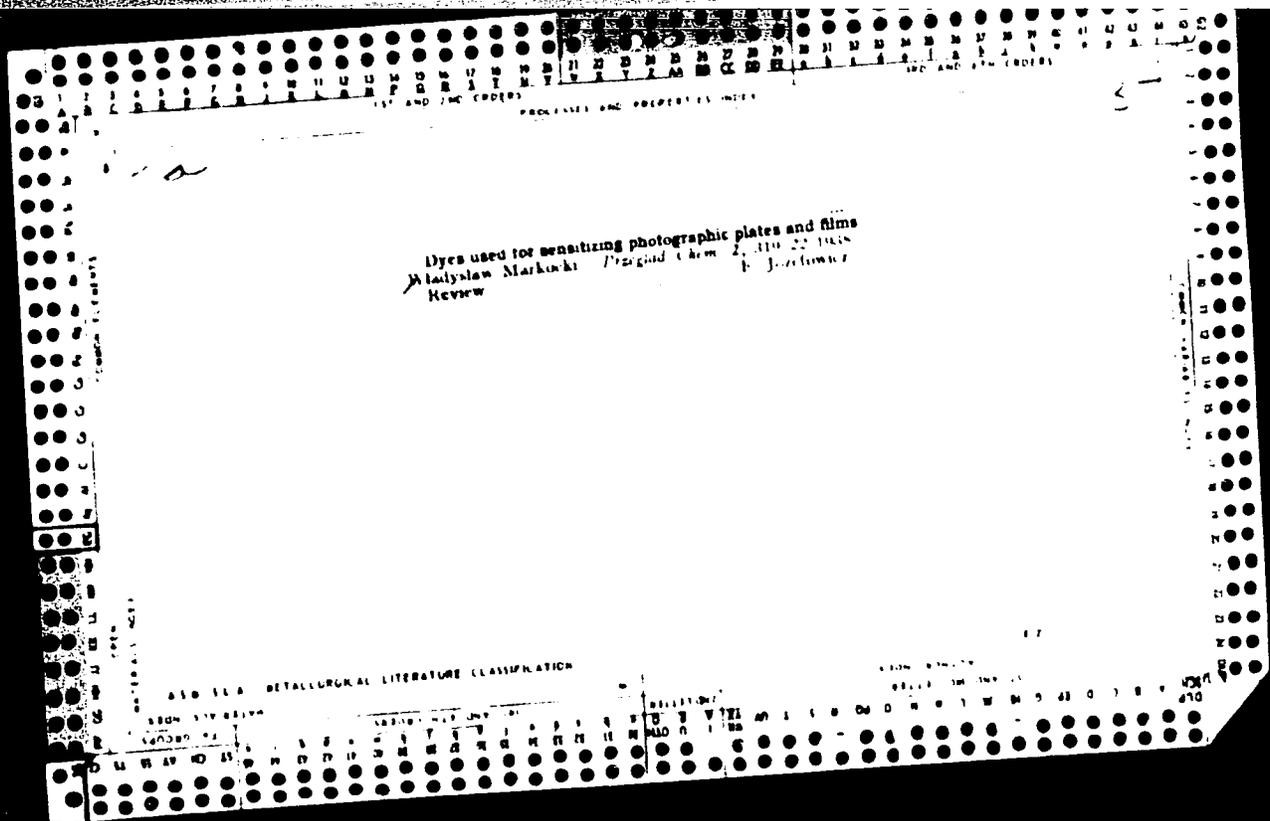
Fig. 1. 1 - chamber head; 2 - stabilizer;
3 - fire tube; 4 - diaphragm;
5 - central opening; 6 - auxiliary
openings



Orig. art. has: 1 figure.

SUB CODE: 21/ SUBM DATE: 01Jul65

Card 2/2



MARKOCKI, W.

77.021.11 : 771.531.17 : 778.3 : 539.172
 382
 Photographic Emulsions for Nuclear Tracks. W. MARKOCKI. *Wtadomosci Chem.* 1952, 6, 2-27. — A satisfactory nuclear track emulsion is prepared from the solutions: (A) gelatin 8 g. in 100 ml. water; (E) potassium bromide, 19 g.; potassium iodide, 0.4 g.; cadmium nitrate, 1.0 g.; dissolved in 50 ml. of water; (C) silver nitrate, 22.5 g. in 50 ml. water. To A, maintained at 60° C., is added alternately 5 ml. B and 5 ml. C, both at 20° C., with vigorous mechanical agitation until both solutions are used up. After 50 min. physical ripening, the emulsion is cooled to set, shredded, and washed 8 hours. After remelting, a solution of water, 5 ml.; ethanol, 5 ml.; 2 per cent chrome alum solution, 2 ml.; 1 per cent potassium bromide solution, 1.5 ml., is added.
 Chem. Abs.

4-11-55
RDP

Use of diphenyliodonium nitrate as addendum in the development of nuclear emulsions. Wladyslaw Markocki (Politechnica, Wroclaw, Poland). Sci. et Ind. Phot. 36: 245-6 (1959).—Tests were made with benzotriazole (I), 5-methyl-7-hydroxy-1,3,4-triazaindolizine (II), and diphenyliodonium nitrate (III) added to Kodak D-19. A fine-grain motion-picture positive emulsion and an exptl. ammoniacal nuclear track emulsion of medium sensitivity were used. I and II showed no advantage over Br⁻. III, 13 ml. of 1% soln. added to a l. of D-19 dild. by 3 parts water, caused a decrease of 50% in fog d. and an increase of 100% in sensitivity of motion picture positive film developed 10 min. No change in sensitivity but a considerable reduction in fog were observed with the nuclear emulsion. III largely or completely suppressed yellow fog. The antifoggant property was strong only in the presence of Br⁻ in the developer. A favorable result also was obtained with diaminophenol developers. T. H. James.

MM
///

2-12-1
4 E 3 Q
3

K

MARKOCKI, Wladyslaw, dr. inz., akiunkt

Origin and development of photography; because of its 120th anniversary of invention. Wiad chem 14 no.4:215-223 Ap '60.

1. Katedra Fototechniki, Politechnika, Wroclaw.

MARKOCKI, Wladyslaw; WESOŁOWSKA-CHERNICHOWSKA, Krystyna

Influence of optical sensitization and desensitization on the
characteristic curve of photographic emulsion. *Chemia stosow* 5 no.2:
281-297 '61.

MARKOCKI, Wladyslaw

A new class of mezo substituted cynin dyes. *Chemia stosow* 5 no.2:
311-316 '61.

1. Katedra Fototechniki, Politechnika Wroclawska.

S/081/63/000/002/010/088
B119/B186**AUTHOR:** Markooki, Wladyslaw**TITLE:** Experimental study of the equation for the characteristic curve of photographic material**PERIODICAL:** Referativnyy zhurnal. Khimiya, no. 2, 1963, 79-80, abstract ZB488 (Chem. stosow., v. 6, no. 2, 1962, 217-253 [Pol.; summaries in Russ. and Eng.])

TEXT: The parameters of the equation for the characteristic curve according to Silberstein (Silberstein L., J. Opt. Soc. Amerika, 1942, 32, 326) were studied theoretically and experimentally. It was found that the effective illuminance resulting from light scattering within the undeveloped emulsion layer in the subsurface layer was much higher on the exposed side of the emulsion than that resulting from light passing directly through the layer surface. The decrease in exposure illumination with the layer depth is therefore not exponential: it is smaller on the upper, greater on the lower surface of the layer. On this basis the parameters of the Silberstein equation were determined experimentally and the

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Experimental study of the ...

S/081/63/000/002/010/088
B119/B186

calculated characteristic curves were compared with the experimental ones. The equation $D/D \log E(0) = [D(\max)/(\log E_{ef}(0) - \log E(1))] [f(\log E_{ef}(0) - f(\log E(1)))]$ agrees well with the experiments; D is the optical density, $E(0)$ the exposure illumination acting on the emulsion layer, taking into account reflection, $E(1)$ the exposure illumination acting on the lower elementary layer of the emulsion of thickness l, $E_{ef}(0)$ the effective exposure illumination in the upper elementary layer of the emulsion. [Abstracter's note: Complete translation.] ✓

Card 2/2

MARKOCKI, W.

The 3d Conference of Scientific and Applied Photography. Wlad
chem 16 no.6:399-401 Je '62.

MOSOCZI, Ferenc; MARKOCZY, Guido

Preparing high-strength coke briquets from coking duff by means of tar binding materials. Energia es atom 14 no.12:546-550 D '61.

1. Tudományos munkatárs, Nehezevegypari Kutató Intézet Szenes Koksstechnológiai Osztálya (for Mosoczi). 2. Tudományos osztályvezető, Nehezevegypari Kutató Intézet Szen- és Koksstechnológiai Osztálya (for Markoczy).

MARKOCZY, Gaido (Budapest); VARGA, Sandor (Budapest)

Workshop coking by bitumen feeding for the increase of gas value number. Kem tud kozl MTA 16 no.1:124-125 '61.

1. Nehezvegyipari Kutato Intezet, Budapest.

(Coke) (Bitumen) (Gases)

MOSOCZI, Ferenc (Budapest); MARKOCZY, Guido (Budapest)

Preparation of high-strength coke briquets from coke duff by means of tar binding materials; manufacture of form coke. Kem tud kozl MTA 16 no.1:125-126 '61.

1. Nehézvegyipari Kutató Intézet, Budapest.

(Coke) (Briquets(Fuel)) (Tar)

MARKOCZI, Guido (Budapest); IVANYI, Gyula (Budapest); MOSOCZI, Ferenc (Budapest)

Experiments relating to the preparation of a carbide factory self-coking electrode mass from Hungarian materials. Kem tud kozl MTA 16 no.1:132-133 '61.

1. Nehezvegyipari Kutato Intezet, Budapest.

(Carbides) (Electrodes) (Coking)

MARKOCZY, Guido, tud.ov.; IVANYI, Gyula, tud.foms.; MOSOCZI, Ferenc, tud.mts.

Experiments in preparing self-burning electrode composition
for carbide manufacturing from Hungarian raw materials. Koh
lap 95 no.5:219-222 My '62.

MARKOCZY, Jeno

Remark about the article "Organizational structure of the furniture-
industry enterprises." Faipar 8 no.1/2:58-59 Ja-F '58.

Markoczy, János

Conference on industrial price formation. p. 235

FAIPAR. (Faipari Tudományos Egyesület)
Budapest, Hungary. Vol. 9, no.8, August 1959

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no.11
November 1959
Uncl.

MARKOCZY, Jeno

Report on the results of a contest arranged by the Committee
on Industrial Economics. Faipar 14, no. 6: 191-192 Je '64.

ACCESSION NR: AR4032156

S/0058/64/000/002/A017/A017

SOURCE: Ref. zh. Fiz., Abs. 2A180

AUTHORS: Dorofeyev, V. A.; Zabiyaikin, G. I.; Zamriy, V. N.; Mar-
komenko, V. I.; Semashko, V. I.; Tulayev, B. P.; Cherny*y, A. V.;
Shibayev, V. D.

TITLE: Automatization of the reduction of measurement results

CITED SOURCE: Tr. 5-y Nauchno-tekhn. konferentsii po yadern.
radioelektron. T. 4. M., Gosatomizdat, 1963, 7-14

TOPIC TAGS: measurement results, data reduction, computer data re-
duction, computer data insertion, computer memory, direct coupling
data insertion, rigid coupling free coupling

TRANSLATION: Problems are discussed involved in the automatization
of the reduction of the experimental data obtained in multichannel

Card 1/3

ACCESSION NR: AR4032156

analyzers, multicomputer systems (hodoscopes), and bubble chambers. It is concluded that it is most sensible to employ for this purpose the existing universal digital computers, capable of solving all mathematical problems. The most rational method of inserting the information is by direct coupling. An analysis based on estimates of the insertion of information into different units of a universal computer is shown that a system in which a large number of experimental data are inserted into the magnetic memory of the computer is among the most advantageous. Two possible coupling variants are considered: "rigid" coupling, when the information is inserted into the memory with the aid of the electronic units of the computer, and "free" coupling, when the information insertion does not depend on the state of the computer, but additional electronic apparatus is used for this purpose. The most promising and advantageous is the "free" coupling. The information is recorded on magnetic tape in this case in the form selected for the given type of computer. This makes it possible to accumulate the experimental data over a

Card 2/3

ACCESSION NR: AR4032156

long time without tying up the computer at the same time, and to process the experimental data without any insertion operations, by direct access to the magnetic memory. Specific features of automated insertion of experimental data into a computer are discussed. L. I.

DATE ACQ: 31Mar64

SUB CODE: CP, SD

ENCL: 00

Card 3/3

MARKON, A.; LEYTES, A. [Leites, A.]; BALODIT, O. [Balodits, O., translator];
MIKHAYLOVSKAYA, Ye., red.; DUNAYSKIY, Z., tekhn. red.

[Enterprise of communist labor] Predpriatie kommunisticheskogo
truda. Translated from the Latvian. Riga, Latviiskoe gos.
izd-vo, 1961. 64 p. (MIRA 15:3)
(Elgava--Railroads) (Socialist competition)

MARKON, I.

[Outline history of Latvian industry] Ocherki po istorii promyshlennosti Latvii. Riga, Latgosizdat, 1951. 125 p.

(MIRA 15:12)

(Latvia--Industries)

MARKOV, L. V.

Self diffusion and viscous flow (sintering and creep) in pressed metal powders. Ya. B. Geguzin, L. O. Markov, and B. Ya. Pines (A. M. Gorkii State Univ., Leningrad; Doklady Akad. Nauk S.S.S.R. 27, 577-80(1962)). It had been shown by P. (C.A. 41, 676) that the equil. concn. of vacancies, C_0 , in a metal is decreased by a compressive stress, P , an amt., $\Delta C = (P\lambda/kT)C_0$, where λ is the lattice spacing. Therefore a difference in vacancy concn. would exist between the end and sides of a rod of length L and radius R subjected to simultaneous longitudinal tension, P_2 , and sidewise compression, P_1 . A flow of vacancies of atoms would occur that would cause a rate of elongation $(1/l)(\Delta L/L) = D\lambda^2(P_2 - P_1)/(\lambda T \lambda R) = (P_2 - P_1)/\eta$, where t is the time, D is the self diffusion coeff., λ is a certain linear distance detg. the concn. gradient, and η is a coeff. of viscosity. An analogous relation between η and D holds for sintering of metal powders. Exptl. data were obtained on 20-40- μ powder of electrolytic Cu and of Fe reduced from oxide. Pressing was done in a mold 4.2 mm. in diam. and 7.5 mm. high, and pressures up to 6 kg./sq. cm. were maintained and sintering H_2 was done at temps. of 900° (Cu) and 1100° (Fe). $\{(\Delta V/V)_t - (\Delta V/V)_0 - c\}$ increased linearly with increasing maintained pressure, P , where V is the vol. The "Laplace pressure" on the pore surfaces was 5.7 kg./sq. cm. for Cu and 2.9 for Fe. The viscosity was independent of pressure. The deduced values of self-diffusion coeff. were 10^{-3} sq. cm./sec. for Cu and 10^{-4} for Fe. Distortions in the cryst. lattice of the powder caused these values to be high. From the temp. dependence of viscosity the activation energy for diffusion was calcd. to be 30,000 cal./mole for Fe and 12,000 for Cu. A. G. Guy

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MARKON, L.O.

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(MIRA 15.7)

(Ukraine--Machinery industry) (Ceramic metals)

MARKON, L.O.

Glass-reinforced plastics used in the manufacture of machine
tools. Mashinostroitel' no.5:9-10 My '62. (MIRA 15:5)
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SHELKOVYY, K.I., inzh.; MARKOV, L.O., inzh.; SHEVCHENKO, A.F., inzh.

Using plastics in technological equipment. Mashinostroenie
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