

DORNETZHUBER, V.; VAGAC, M.; DOBROTA, S.; BAJAN, A.; STOJANOVA, E.

Morphogenesis of the Kveim-Nickerson skin reaction in sarcoidosis.
Bratisl. lek. listy 45 no.3:135-143 15 Ag '65.

1. Ustav tuberkulozy v Bratislave (riaditel MUDr. J. Markovic)
Katedra ftizeologie Ustavu pre dalsie vzdelavanie lekarov a
farmaceutov v Bratislave-Podunajskych Biskupiciach (veduci doc.
MUDr. K. Virsik) a Krajska nemocnica tuberkulozy a chorob
plucnych v Bratislave-Podunajskych Biskupiciach (riaditel doc.
MUDr. K. Virsik), Oddelenie hrudnej chirurgie (veduci MUDr.
S. Dobrota).

DOBROTA, S. DURATNY, K.; TEICHER, L.; DORNETZHUBER, Vl.; FINDOVA, V.

On surgical and some other problems of chemodectoma of the glomus caroticum. Bratisl. lek. listy 45 no.3:178-189 15 Ag '65.

1. Krajska nemocnica tuberkulozy a chorob plucnych v Bratislave-Podunajskych Biskupiciach (riaditel doc. MUDr. K. Virsik), Oddelenie hrudnej chirurgie (veduci MUDr. S. Dobrota) a Ustav tuberkulozy v Bratislave (riaditel MUDr. J. Markovic).

SCHWARTZ, E.; VALENTINOVA, I.; SIMKOVA, V.; DOMNETZMUBER, V.

Determination of the biological effect of gibberellic acid
in guinea pigs with some biochemical methods. Bratisl. lek.
listy 44 no.10:621-627 30 N '64

1. Krajska nemocnica tuberkulozy a chorob plucnych, (riaditel
MUDr. K. Virsik), a Ustav tuberkulozy v Bratislave (riaditel
MUDr. J. Markovic).

Biochemistry

CZECHOSLOVAKIA

POGADY, J.; DORNETZHUBER, V.; Kraj Psychiatric Hospital (Psychiatricka Liecebna), Pezinok, and Institute of Tuberculosis (Ustav Tuberkulozy), Bratislava.

"Histochemical Determination of Glycogen and Sulfhydryl Groups in Some Model Inhibitory Conditions."

Prague, Ceskoslovenska Psychiatrie, Vol 62, No 6, Dec 66, pp 369-373

Abstract [Authors' English summary modified]: Glycogen in the nervous cells is very stable; it is very difficult to induce changes in its retention by the action of drugs. Insulin coma is not caused by a lack of glycogen in brain tissue, but by other functional reasons. Sulfhydryl groups can serve as an indicator of respiration of brain tissue; they do not show any changes due to action of insulin. 2 Figures, 4 Western, 1 Czech, 3 Russian references. (Manuscript received 6 Jan 66).

JACA, K.; DOBŠIETZHUDEKOVÁ, M.

Intraspinal tumors in children. *Czech. Neurol.* 28 no.6:403-407
1965.

1. Neurochirurgické oddelení Krajského ústavu národního zdraví
Západoslovenského kraja v Bratislave (vedúci MUDr. K. Jaca,
CSc.).

DORNEYI, Josef, dr.; MARAZ, Janos

The organization of the employees' basic wage economy; experiences
in the Ganz-MAVAG. Munka szemle 6 no.9:18-21 S '62.

DORNIC, J.; CICHÁ I.

Finds of cretaceous sediments in the western part of the Boskovice furrow near
Lomnice north of Tisnov. p. 443

Prague. Ustredni ustav geologicky. VESTNIK. Prague, Czechoslovakia, Vol. 33,
no. 6, 1958

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

DORNIC, Jan.; KHEIL, Jiri

- New discovery of fossil fauna in the Tertiary of southern Bohemian basins. Cas min geol 7 no.3:353-355 '62.

1. Ustredni ustav geologicky, Praha 1.

DORNIC, S.; STRIZENEC, M.

The amount of usable information and the extent of immediate memory in uniform visual stimulation. Acta nerv. sup. (Praha) 6 no.4:399-400 '64.

1. Ustav experimentalnej psychologie Slovenskej akademie ved, Bratislava.

DORNICK, Leopold

New series of AP electromotors in the Moravskoslezské elektrotechnické závody Mohelnice National Enterprise. Elektrotechnik 18 no.6: 179-182 Jo '63.

1. Moravskoslezské elektrotechnické závody Mohelnice, n.p.

AL'PERIN, P.M., doktor med.nauk; GURKOVICH, I.B.; DORNIKOVA, N.P.; LOGINOVA,
F.I.; MERKUL', V.Ye.; RODINA, R.I.; SKACHILOVA, M.N.; TIKHONOVA, A.A.

Functional changes in hypertension following sleep therapy. Terap.
arkh. 29 no.11:58-68 N '57. (MIRA 11:2)

1. Iz gosital'noy terapevticheskoy kliniki pediatricheskogo
fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova
i gemoterapevticheskoy kliniki Tsentral'nogl'ordena Lenina instituta
gematologii i perelivaniya krovi (dir. - chlen-korrespondent AMN
SSSR prof. A.A.Bagdasarov)

(HYPERTENSION, therapy,
sleep ther. (Rus))
(SLEEP, therapeutic use,
hypertension (Rus))

ROBINSON, M.P., Cond Nat Sci—(1958) "A new method of chemotherapy to lower
~~the~~ *tenor* ~~the~~ *tenor* patients." J. Gen. Intern. Med. (1958) 11: 1-10 (Soviet State Med Inst in
M. P. Pirogov), 300 pages (1958, 1959)

-107-

GRIGOR'YANTS, A.N., kand.med.nauk; DORNIKOVA, N.P. (Moskva)

The effect of vitamin B12 on the excitability of the central nervous system. Klin.med. 37 no.9:91-97 S '59. (MIRA 12:12)

1. Iz gospiatal'noy terapevticheskoy kliniki pediatricheskogo fakul'teta (dir. - deystvitel'nyy chlen AMN SSSR prof. A.A. Bagdasarov)
II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova.
(VITAMIN B12, pharmacology)
(CENTRAL NERVOUS SYSTEM, pharmacology)

DORNYEI, Jozsef, dr.

Some organizational questions relating to the amalgamation of the machinery industry enterprises; a polemic article. Munka szemle 6 no.11:4-8 N '62.

HUNGARY

DOGNYEI, Sandor, MD [Affiliation not given]

"John Shaw Billings"

Budapest, Orvosi Hetilap, Vol. 103, No 49, 9 Dec 62; pp 2329-2331.

Abstract: A brief biography, with emphasis on his professional career, of the American physician and professor at Johns Hopkins University, John Shaw Billings (1838-1913). Billings' connection with Hungarian medicine stems from his having been among the first eight persons awarded honorary degrees by the Medical Faculty of the Budapest College of Medicine, in 1896, though the very fact of his being so honored was due to his work on a Medical Index (at first called "Index Catalogue of the Library of the Surgeon-General's Office) which took into account the Hungarian medical literature as well. Although Billings is primarily remembered as the organizer and director of the New York Public Library, in the field of medicine his fame is due to his life-long preoccupation with the indexing and cataloguing of medical information, whether in the form of articles, books or other bibliographical material. The

1142

KUBICKI, Stefan; LATALLO, Zbigniew; KACNER, Joanna; DOROBA, Krystyna;
WASTLEWSKA, Helena.

Evaluation of the antithrombin test and the starch tolerance
test in the diagnosis of pancreatic diseases. Pol. tyg. lek.
19 no.42:1593-1596 19 0 '64

1. Z Oddziału Chorob Wewnętrznych Centralnego Szpitala Kli-
nicznego MSW w Warszawie (kierownik: prof. dr. med. Stefan
Kubicki) i z Laboratorium Centralnego Szpitala Klinicznego
MSW w Warszawie (kierownik: dr. farm. Mieczysław Trzaski).

DOROBA, Marian

Hydrocortisone on orthopedics and traumatic surgery. Chir. narz.
ruchu 20 no.1:41-46 1955.

1. Z Miejskiego Szpitala Chirurgii Urazowej w Warszawie. Dyrektor:
doc. dr K. Szniewiec.

(ADRENAL CORTEX, hormones,
hydrocortisone, ther. of joint dis. & wds.)
(JOINTS, diseases,
ther., hydrocortisone)
(WOUNDS AND INJURIES, therapy,
hydrocortisone)

DOROBA, Marian.

Use of cortisone in orthopedics and traumatic surgery. Chir.
nars. ruchu 20 no.4:313-322 1955.

1. Z Miejskiego Szpitala Chirurgii Urazowej w Warszawie.
Dyrektor Szpitala dr. Z.Deka. Warszawa, ul. Narbutta 76, m. 5.
(ADRENAL CORTEX, hormones
hydrocortisone use in orthopedics & traum. surg.)
(WOUNDS AND INJURIES, therapy
hydrocortisone in traum. surg.)

TOCZEK, St.: DOROBA, M.; ~~TELESZCZYNSKI, M.~~

Cerebral fat embolism. Polski przegl. chir. 30 no.10:989-997 Oct 58.

1. Z Kliniki Neurochirurgii A. M. w Warszawie Kierownik: prof. dr
J. Chorobski orag z Oddzialu Ortopedycznego Szpitala Miejskiego w
Warszawie i Kliniki Ortopedycznej A.M. w Gdansk. Kierownik: Prof.
dr Z. Ambros. Adres autora: Stanislaw Toczec, Warszawa, ul. Smiala.
(CEREBRAL EMBOLISM AND THROMBOSIS
fat embolism (Pol))

ANISIMOV, I.V.; DROBANTSU, I.

Use of electron analog computers for modeling the process of the
rectification of binary mixtures. Khim. prom. no. 6:453-458 Je
'64. (MFA 18:7)

IGROBANTU, Cornelia

Contributions to the knowledge of the rotifer fauna in the complex vegetation of the Crapina-Jijila marshes. Studii cerc biol s. zool 16 no. 4:343-350 '64.

L 29768-66 IJP(c)

ACC NR: AP6020888

SOURCE CODE: RU/0003/65/016/009/0440/0442

AUTHOR: Dorobantu, I.

55
B

ORG: none

TITLE: Use of electronic modelling for studying the static and dynamic properties of the rectification process

SOURCE: Revista de chimie, v. 16, no. 9, 1965, 440-442

TOPIC TAGS: analog computer, automatic regulation, distillation, methanol, water

ABSTRACT: The author analyzes some of the results of a study of the binary rectification process using analog computers. For a methanol-water rectification mixture, the concentration distribution along the column height is established, as is the spreading of oscillations created by sinusoidal disturbances at the outlet of the system. On the basis of the results, some recommendations are given for the elaboration of automatic regulation mechanisms for the rectification process. Orig. art. has: 4 figures. [Based on author's Eng. abstract] [JPRS]

SUB CODE: 07, 13, 09 / SUBM DATE: none / OTH REF: 003 / SOV REF: 002

Card 1/1 CC

UDC: 66.048.37.001.2-523.8

DOROBANTU, Ilie; MOCANU, M., ing.; MOCANU, I., ing.; SERBANESCU, D., ing.;
BOGZA, Virgil, ing.; COJOCARU, V.

Advanced technology and the increase of labor productivity. Probleme
econ 17 no.3:162-165 Mr '64.

1. Inginer sef conceptie, Uzina Vulcan, Bucuresti (for Dorobantu).
2. Tehnolog sef, Uzina Vulcan, Bucuresti (for Mccanu, M.).
3. Sef cabinet tehnic, Uzina Vulcan, Bucuresti (for Mocanu, I.).
4. Director, Intreprinderea textila Bucegi (for Serbanescu).
5. Director, Intreprinderea mecanica Roman (for Bogza).
6. Inginer, sef, Fabrica de ulei "Muntenia", Bucuresti (for Cojocaru).

CHIRILEI, H.; DOROBANTU, N.; SILE, Elena

Determination of the degree of frost resistance of some new kinds of fall corn by the cytophysiological method. Studii cerc biol veget 12 no.1:99-106 '60. (EEAI 10:1)

1. Comunicare prezentata de N.Salageanu, membru corespondent al Academiei Republicii Populare Romine. (Rumania--Corn (Maize))

CHIRILEI, H.; STEFAN, V.; DOROBANTU, N.; BOTI, D.; CURTICAPEANU, Georgeta;
BOTEA, M.

Influence of various fertilizers on the phosphorus absorption and physiological processes in sugar beet plants, as studied by the method of radioactive isotopes. Studii cerc biol veget 14 no.3:277-286 '62.

1. Comunicare prezentata de N. Salageanu, membru corespondent al Academiei R.P.R., membru al Comitetului de redactie si redactor responsabil, "Studii si cercetari de biologie; Seria biologie vegetala."

CHIRILEI, H.; DOROBANTU, N.; CURTICAPEANU, Georgeta

Influence of magnesium, potassium phosphorus, and nitrogen fertilizers on the physiological processes of maize plants (Zea mays). Studii cerc biol veget 15 no.4:469-477 '63.

1. Comunicare prezentata de academician N. Salageanu.

CHIRILEI, H.; STEFAN, V.; DOROHANTU, N.; CURTICĂPEANU, Georgeta

Influence of organic and bacterial mineral fertilizers on
some physiological processes of corn (*Zea mays*). Studii
cerc biol s. bot 16 no. 4:281-287 '64.

1. Chair of Plant Physiology, "Nicolae Balcescu" Agricultural
Institute.

POPOVICI, I.; DOROBANTU, R.

Presence of the bacillus *Erysipelothrix rhusiopathiae* in the digestive tract of the Danube River and Black Sea fish in Rumania. Rev biol 5 no.4:313-317 '60. (EEAI 10:9)

1. Institut de Pathologie et d'Hygiene Animales, Bucarest. 2Membre correspondant de l'Academie de la R.P.R.(for Popovice).

(Fishes) (*Erysipelothrix rhusiopathiae*)
(Digestive organs)

DOROBANTU, S.

Marginal remarks on the article: Observations Regarding Road Constructions in the Rumanian People's Republic. p. 26.

REVISTA TRANSPORTURILOR. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Romnia si Ministerul Transporturilor Rutiere, Navale si Aeriene) Bucuresti, Rumania. Vol. 6, no. 1, Jan. 1959.

Monthly List of East European Accessions (EEAI) IC, Vol. 8, no. 7, July 1959

Uncl.

DOROBISZ, Tadeusz

Effect of general hypothermia on reactivity of the system. Polski
przeł.chir. 27 no.7:634-640 July '55.

1. Z I Kliniki Chirurgicznej A.M. we Wrocławiu, Kierownik: doc.
dr. K. Czyżewski.

- (BODY TEMPERATURE,
hypothermia, exper., eff. on reactivity of system)
- (BLOOD CIRCULATION, physiology,
eff. of exper. hypothermia in cats)
- (BLOOD PRESSURE, physiology
eff. of exper. hypothermia in cats)

~~DOROBISZ, Tadeusz~~; JANTAKOWA, Alina

Hemorrhagic diathesis as a complication of thrombosan therapy. Polski tygod. lek. 11 no.15:640-645 9 Apr 56.

1. Z I Kliniki Chir., Akademii Medycznej we Wroclawiu; kier. prof. dr. Kazimierz Czynowski i z III Kliniki Chorob Wewn. Akad. Med. we Wroc., kier. prof. dr. Edward Sacseklik Wroclaw III Kl. in. Chor., Wewn.

(COUMARIN, derivatives,

bishydroxycoumarin causing hemorrh. diathesis (Pol))

(HEMORRHAGIC DIATHESIS, etiology and pathogenesis, bishydroxycoumarin (Pol))

DOROBISZ, Tadeusz; DZIERZKOWA, Wanda

Incompatible blood transfusion in a patient suffering from traumatic shock. *Polskie arch. med. wewn.* 26 no.12:1943-1950 1956.

1. Ze Stacji Krwiodawstwa we Wroclawiu Dyrektor: dr. med. T. Dorobisz. Wroclaw, ul. Weglowa 5.

(SHOCK, ther.

blood transfusion in traum. shock, incompatibility causing hemolytic reaction (Pol))

(BLOOD TRANSFUSION, compl.

hemolytic reaction caused by incompatibility in patient with traum. shock (Pol))

(HEMOLYSIS, etiol. & pathogen.

blood transfusion incompatibility causing hemolytic reaction in patient with traum. shock (Pol))

DOROBISZ, Tadeusz; JANIAKOWA, Alina

Case of hemophilia with combined deficiency of antihemophilic factor A and B. Polskie arch. med. wewn. 27 no.1:99-112 1957.

1. Z I Kliniki Chirurgicznej A.M. we Wrocławiu Kierownik: prof. dr. med. K. Czerwinski i z III Kliniki Chorob Wewnętrznych A.M. we Wrocławiu Kierownik: prof. dr. Med. B. Szczeklik. Adres autorów: Wrocław, ul. Pasteura 4, III Klinika Chor. Wewn. A.M.
(HEMOPHILIA, case reports
with antihemophilic factor A & B defic. (Pol))

DOROBISZ, Tadeusz; DZIENKOWA, Wanda; OLEARCZYK, Julian

Preparation and application of a suspension of washed erythrocytes.
Polskie arch.med.wewneta. 29 no.12: 1601-1606 '59.

1. Ze Stacji krwiodawstwa we Wroclawiu. Dyrektor: doc. dr. med.
T. Dorobisz.

(BLOOD TRANSFUSION)
(ERYTHROCYTES)

DOROBISZ, T.

Hypocoagulability of the blood in pulmonary surgery. Postepy hig. med.
dosw. no.2:214-215 '60.

1. Z I Kliniki Chirurgicznej A. M. we Wroclawiu Kierownik: prof. dr
K. Czyzewski.

(PNEUMONECTOMY compl) (FIBRINCLYSIS)

DOROBISZ, Tadeusz; JANIACOWA, Alina; JANIAK, Tadeusz

Studies on blood coagulation in dogs in experimental hemorrhagic shock. Polski tygod.lek. 15 no.26:977-981 27 Je '60.

1. Z Pracowni Chirurgii Doswiadczalnej; kierownik; doc. dr T.Dorobisz, I Kliniki Chirurgicznej A.M. we Wroclawiu; kierownik: prof. dr K.Czyzewski, III Kliniki Chorob Wewnetrznych A.M. we Wroclawiu; kierownik: prof. dr E.Szczeklik, Kliniki Chorob Wewnetrznych Wydz. Wet W.S.R. we Wroclawiu; kierownik; doc. dr B.Gancars

(SHOCK exper)
(BLOOD COAGULATION)

DOROBISZ, Tadeusz; JANIAKOWA, Alina; JANIAK, Tadeusz

Studies on the blood coagulation system in experimental traumatic
pneumo-pleural shock. Polski przegl.chir.32 no.2:113-122 F '60.

1. Z I Kliniki Chirurgicznej A.M. we Wrocławiu. Kierownik: prof.
dr. K. Czyżewski; z III Kliniki Chorob Wewnętrznych A.M. we Wroc-
ławiu. Kierownik: prof.dr. E. Szczeklik; z Zakładu Chorob Wewnętrz-
nych Wydz. Wet. W.S.R. we Wrocławiu. Kierownik: doc.dr. B. Gancars.

(BLOOD COAGULATION)

(SHOCK exper.)

(LUNGS physiol.)

(PLEURA physiol.)

DAWISKIŁBA, Mail; DOROBISZ, Tadeusz

Management of perforation of the thoracic parts of the esophagus.
Polski przegl.chir.32 no.2:123-131 F '60.

1. Z I Kliniki Chirurgicznej A.M. we Wrocławiu. Kierownik: prof.
dr. K. Czyżewski.

(ESOPHAGUS wds.& inj.)

DONOBISZ, Tadeusz; CHRZANOWSKA, Maria; PRZESTALSKI, Stanislaw; SKORA, Klemens

Penetration of radiophosphorus P_{32} into the erythrocytes in various stages of preservation. Acta physiol Pol 12 no.5:751-755 '61.

1. Z I Kliniki Chirurgicznej AM we Wroclawiu Kierownik: prof. dr K. Czynowski Z Katedry Fizyki WSR we Wroclawiu Kierownik: s-ca prof. dr S. Przystalski.

(PHOSPHORUS blood) (ERYTHROCYTES chem)
(BLOOD PRESERVATION)

DOROBISZ, Tadeusz

On the problem of erroneous transfusions of heterologous blood.
Polski tygod. lek. 16 no.19:709-713 8 My '61.

1. Ze Stacji Krwiodawstwa we Wroclawiu; dyrektor: doc. dr med.
Tadeusz Dorobisz.

(BLOOD TRANSFUSION compl) (BLOOD GROUPS)

DOROBISZ, Tadeusz; ZIEMNIAK, Jerzy

Inoculation viral hepatitis as a complication after the transfusion of preserved blood. Polski tygod. lek. 16 no.42:1612-1615 16 0 '61.

1. Ze Stacji Krwiodawstwa we Wroclawiu; dyrektor: doc. dr med.
Tadeusz Derobisz.
(JAUNDICE HOMOLOGOUS SERUM) (BLOOD TRANSFUSION compl)
(BLOOD PRESERVATION)

DOROBISZ, Tadeusz

Use of fibrinogen in controlling hemorrhages from esophageal varices.
Pol. tyg. lek. 16 no.51:1967-1971 18 D '61.

1. Z I Kliniki Chirurgicznej A.M. we Wrocławiu; kierownik: prof. dr
K. Czynewski.

(ESOPHAGEAL VARICES compl) (FIBRINOGEN ther)
(HEMOSTASIS)

DOROBISZ, TADEUSZ

SURNAME, Given Names

Country: Poland

Academic Degrees:

Affiliation:

Source: Krakow, Przegląd Lekarski, Vol XVII, Ser II, No 9, 1961, pp 331-333

Data: "An Acute Defibrination Syndrome Cured by the Use of Fibrinogen."

Authors:

DOROBISZ, Tadeusz, Doc Dr, Blood Donation Station (Stacja Krwiodawstwa),

~~Wroclaw~~; Director (Dyrektor): Doc Dr T Dorobisz

JANIAKOWA, Alina, Dr Med, Laboratory of Blood Coagulation (Pracownia Krzep-
niecia Krwi); Director (Kierownik): Dr Med A Janiakowa

WEISELS, Joachim, Dr, Obstetric-Gynecological Ward of the E Biernacki
Municipal Hospital (Oddzial Polozniczo-Ginekologiczny Szpitala Miejskiego
im E Biernackiego), Walbrzych; Resident Physician (Ordynator): Dr J Weisels

OLEARCZYK, Julian, Academic Degrees not given, Clinic of Internal Diseases
No III of the Medical Academy (III Klinika Chorob Wewnetrzynicy, Akademia
Medyczna), Wroclaw; Director (Kierownik): Prof Dr E Szczeklik

670 981643

DOROBISZ, T.; PRZESTALSKI, St.; BIELINSKI, E.; CENA, K.

The influence of ionising radiation on phosphate ions penetration into erythrocytes. Postepy biochem. 8 no.4:581 '62.

1. Ze Stacji Krwiodawstwa we Wroclawiu i z Katedry Fizyki WSR we Wroclawiu.

(RADIATION EFFECTS) (ERYTHROCYTES)
(PHOSPHATES)

DOROBISZ, Tadeusz; MICHALSKI, Zbigniew; JAWORSKI, Zdzislaw; PAWLOWSKI,
Andrzej

Comparative studies on dog homologous aortic grafts preserved by various means. Pat. polska 13 no.1:1-16 '62.

1. Z Pracowni Chirurgii Doswiadczalnej Kierownik: doc. dr T. Dorobisz
Z I Kliniki Chirurgicznej AM we Wroclawiu Kierownik: prof. dr.
K. Czyzewski Z Katedry Anatomii Patologicznej Wyzd. Wet. WSR we
Wroclawiu Kierownik: prof. dr A. Zakrzewski.
(AORTA transpl)

DCROBISZ, Tadeusz; JANIAKOWA, Alina

Acute fibrinolytic syndrome in liver cirrhosis surgery. Pol. tyg. lek.
17 no.17:639-641 23 Ap '62.

1. Z I Kliniki Chirurgicznej AM we Wrocławiu; kierownik: prof. dr
K. Czyżewski i z III Kliniki Chorob Wewnętrznych AM we Wrocławiu;
kierownik: prof. dr E. Saczeklik.

(LIVER CIRRHOSIS surg) (FIBRINOLYSIS)
(SURGERY OPERATIVE compl)

DOROBISZ, Tadeusz; OLEARCZYK, Julian

Our experience with the synthesis and clinical use of fibrinogen. Pol.
tyg. lek. 17 no.21:828-831 21 My '62.

1. Ze Stacji Krwiodawstwa we Wroclawiu; dyrektor: doc. dr med.
Tadeusz Dorobisz.

(FIBRINOGEN)

DOROBISZ, Tadeusz; JANIAKOWA, Alina; KLAWE, Henryk; MATCZUK, Walenty

On the problem of early diagnosis and therapy of acute afibrinogenemic syndrome in obstetrics. Ginek. Pol. 33 no.1:9-18 '62.

1. Ze Stacji Krwiodawstwa we Wrocławiu Dyrektor: doc. dr T. Dorobisz
Z III Kliniki Chorob Wewnętrznych AM we Wrocławiu Kierownik: prof. dr
E. Szczeklik Z Miejskiego Szpitala Ginekologiczno-Położniczego im.
L. Neugebauera we Wrocławiu Dyrektor: dr H. Klawe.

(AFIBRINOGENEMIA in pregn) (PREGNANCY compl)

BIELICKI, Franciszek; CHRZANOWSKA, Maria; DOROBISZ, Tadeusz; SKORA, Klemens

Clinical value of I-131 tests in thyroid neoplasms. Polski
przegl. chir. 35 no.9:954-956 '63.

1. Z I Kliniki Chirurgicznej we Wroclawiu. Kierownik: prof.
dr. K.Czyzewski.

ACCESSION NR: AP4029530

P/0056/64/015/001/0085/0092

AUTHOR: Dorobisz, Tadeusz (Dorobisz, T.) (Docent, Doctor); Przeslalski, Stanislaw (Przeslalski, S.) (Assistant Professor, Doctor); Masiak, Michal (Masyak, M.); Bielinski, Edward (Belin'ski, Ye.); Gradzinski, Andrzej (Gradzin'ski, A.)

TITLE: Effect of cobalt 60 gamma radiation on red blood cells from a human-blood bank

SOURCE: Acta physiologica polonica, v. 15, no. 1, 1964, 85-92

TOPIC TAGS: blood cell, red blood cell, blood bank, human blood, gamma radiation, cobalt, cobalt 60, phosphate ion, hemoglobin content, hematocrit index, osmotic resistance, hemolysis, plasma, potassium, irradiated blood, potassium level, sodium, sodium level, inorganic phosphorus

ABSTRACT: Human bank blood was submitted to doses of $2 \cdot 10^5$ r of gamma rays and was then stored for four weeks. Significant differences in the penetration of phosphate ions into the red blood cells of irradiated and control blood, in hemoglobin content, or in hematocrit indexes were not observed. In irradiated

Card: 1/2

ACCESSION NR: AP4029530

blood a slight shift in pH toward the alkaline side and somewhat lower values of PCO_2 were found. After eight days minimal osmotic resistance of the red blood cells of irradiated blood showed complete breakdown, accompanied by marked hemolysis. The most interesting observation is that the levels of potassium in plasma of irradiated blood increased sevenfold 24 hours after irradiation, but further elevation did not occur. In control blood after eight days the potassium level were two times higher than initially, and after four weeks, four times. Sodium levels were lowered in the plasma of both groups of blood in parallel to the elevation of potassium levels. Inorganic phosphorus was increased in proportion to degree of hemolysis, especially in irradiated blood.

ASSOCIATION: Stacja Krwiodawstwa, Wrocław (Blood Donor Station); Katedra Fizyki WSR (Physics Department, Higher Agricultural School); II Klinika Chirurgiczna; AM, Wrocław (Surgical Clinic of the Academy of Medicine)

SUBMITTED: 21Mar63

DATE ACQ: 01May64

ENCL: 00

SUB CODE: IS

NO REF SOV: 000

OTHER: 008

Card

2/2

ERZECKI, Andrzej; DOROBISZ, Tadeusz; SKORA, Klemens; SZEPIETOWSKI, Tomasz

Injuries of the ~~granios-oid~~ brain. Pol. przegl. chir. 36 no.1:
21-29 Ja'64

1. Z Kliniki Chorob Nerwowych AM we Wroclawiu (kierownik: prof.
dr. R.Arend) i z Kliniki Chirurgicznej AM we Wroclawiu (kie-
rownik: prof.dr. K.Czyzewski).

*

DOROBISZ, Tadeusz; PRZESTALSKI, Stanislaw; MASIAK, Michal; BIELINSKI, Edward; GRADZINSKI, Andrzej

Effect of Co-60 gamma-rays on erythrocytes in preserved human blood. Acta physiol. Pol. 15 no.1:85-92 Ja-F '64.

1. Z Wojewodzkiej Stacji Krwiodawstwa (Kierownik: doc. dr T. Dorobisz); Z Katedry Fizyki Wyzszej Szkoły Rolniczej (Kierownik: z-ca prof. dr S. Przystalski) Z II Kliniki Chirurgicznej Akademii Medycznej we Wrocławiu (Kierownik: prof. dr W. Bross).

DOROBISZ, Tadeusz; PRZESTALSKI, Stanislaw; BIELINSKI, Edward; KILIAN, Mięczyński; OLEARCZYK, Julian

Penetration of P-32 into erythrocytes in various modes of the preservation. Acta physiol. Pol. 15 no.6:839-844 N-D '64

1. Z I Kliniki Chirurgicznej Akademii Medycznej we Wrocławiu (kierownik: prof. dr. K. Czyżewski); z Katedry Fizyki Wzyszej Szkoły Rolniczej we Wrocławiu (kierownik. z-ca prof. dr. S. Przystalski) i ze Stacji Krwiodawstwa we Wrocławiu (kierownik: doc. dr. T. Dorobisz).

OLEARCZYK, Julian, dr. med.; DOROBISZ, Tadeusz, doc. dr. med.; ZIEMNIAK, Jerzy.

Evaluation of conditions in the production of some preserved
blood derivatives. Pol. tyg. lek. 19 no.50:1934-1936 14 D '64.

1. Z Działu Suchego Osocza (Kierownik: dr. med. J. Olsarczyk)
i Stacji Krwiodawstwa we Wrocławiu (Dyrektor: doc. dr. med.
T. Dorobisz.

DOROBISZ, Tadeusz; doc. dr. med.; OLEARCZYK, Julian, dr. med.; PARTYKA,
Tadeusz; ZIEMIAK, Jerzy

Further experiences in obtaining plasma by partial concentration
of preserved blood. Pol. tyg. lek. 19 no.52:2008-2009 28 D'64.

1. Z Działu Suchego Osocza (kierownik: dr. med. Julian Olearczyk);
Stacji Krwiodawstwa we Wrocławiu (dyrektor: doc. dr. med. Tadeusz
Dorobisz).

DOROBKOV, I..A.

"Discovery of the Genus Psephaea Crosse in Middle Eocene Deposits of the Northern Caucasus," Dok. AN. Vol. 66, No. 4, 1949.

Geolog. Museum im. A. P. Karpinskiy, Acad. Sci.

DOROBISOVA, I. S.

35891 Lyneburgit iz stebnika v prikarpati. Mineral. Sbornik (L'voŭ), No. 3, 1949, c.
197-200--Bibliogr: 5 Nazv

SO: Letopis' Zhurnal'nykh Statey, No. 49, 1949

AUTHOR: Dorochek, S.I., Iapkin, N.I. and Shubin, G.N. 124

TITLE: Change of the plasticity of transformer steel during the process of cooling. (Izmenenie plastichnosti transformatornoy stali v protsesse okhlazhdeniya.)

PERIODICAL: "Fizika Metalloy i Metallovedenie" (Physics of Metals and Metallurgy), 1957, Vol.IV, No.1 (10), pp.171-176 (U.S.S.R.)

ABSTRACT: Certain problems of the kinetics of the change of the plasticity of hot rolled transformer steel during cooling after low temperature annealing, without a protective atmosphere, were studied. The influence of the speed and the temperature range of cooling on the plasticity of the transformer steel was established by the method of step-wise cooling. The investigations were carried out on 0.5 x 30 x 250 mm specimens of transformer steel containing 4.0 to 4.2% Si and minimum contents of harmful admixtures. After heating to a given temperature between 750 and 850 °C and holding for two hours the individual packets were furnace cooled at the rate of 5 °C/hr and 10, 20, 40 and 60 °C/hr to specific temperatures, which was followed by subsequent cooling in air. The temperature from which the specimens were cooled in air was arbitrarily called "fixation temperature". The results plotted in Fig.1 indicate that the initial point of rapid cooling influences considerably the plasticity of transformer steel. The toughness of high alloyed trans-

Change of the plasticity of transformer steel during the ¹²⁴ process of cooling. (Cont.)

former steel during cooling changes in accordance with a curve containing a maximum which is clearly detected by the method of step-wise cooling applied in the here described experiments. Intensified cooling after annealing increases the toughness of transformer steel, and it is possible to obtain a sufficiently high plasticity without appreciably reducing the magnetic properties by applying optimum cooling conditions. Presence of coarse cementite along the ferrite grains does increase the brittleness of the steel, but is not the sole cause of brittleness. Apparently the reduction in toughness is to a large extent due to "temper" brittleness. 6 figures including 5 graphs. 2 Russian references.

Ural Ferrous Metals Research Institute. Recd. May 11, 1956.

DOROCHENKO, M.G.; SHMUKLER, M.Ya.; SAVCHENKO, Kh.; POTUPIN, A.M.

Our methods for welding and transporting long rail lengths. Put'
i put.khoz. 4 no.11:20-23 N '60. (MIRA 13:12)

1. Nachal'nik NRP-16, st.Dublyany-Iyashki, L'vovskoy dorogi (for
Dorochenko). 2. Priyemshchik, st. Lublyany-Iyashki, L'vovskoy
dorogi (for Shmukler). 3. Glavnyy inzh.sluzby puti, g. L'vov (for
Savchenko). 4. Starshiy inzh.sluzby puti, g. L'vov (for Potupin).
(Railroads--Rails)

SABLINSKA, Bożena; DOROCIĄK, Roman; HARUPPA, Jerzy; JENTYS, Wanda; PIATKOWSKI, Zbigniew; RUSTÓWSKI, Jerzy

The results of the treatment of cancer of the cervix, uteri during the years 1954 and 1955. Nowotwory 12 no.3:247-250 '62.

1. Z Oddziału Onkologii Ginekologicznej Instytutu Onkologii w Warszawie Kierownik: doc. dr med. L. Tarłowska Dyrektor: prof. dr med. W. Jasinski.

(CERVIX NEOPLASMS)

DOROCIAK, Roman

Two cases of destructive hydatid mole with a peculiar clinical course. Nowotwory 13 no.3:275-279 J1-S'63.

1. Z Oddziału Onkologii Ginekologicznej Instytutu Onkologii im. Marii Skłodowskiej-Curie w Warszawie. Kierownik: doc.dr.med. L.Tarłowska; dyrektor: prof.dr.med. W.Jasinski.

*

CZICHON, Herbert, mgr.; DOROCIŃSKI, Jan, inz.

Application of vinyl polyalcohol to the preparation of chemigraphic emulsion sensitive to light. Pt.1. Poligrafika 13 no.9:8-13 S '61.

1. Centralne Laboratorium Poligraficzne, Warszawa.

DORODENKOV, I.M., inzh., red.; IFTINKA, G.A., red. izd-va; GARNUKHIN, Ye.,
tekh. red.

[Instructions for planning floors in plants with corrosive
atmospheres] Instruktsiia po proektirovaniu polov v tsekhakh s
agressivnymi sredami. Moskva, Gos. izd-vo lit-ry po stroit.,
arkhit. i stroit. materialam, 1961. 83 p. (MIRA 14:6)

1. Akademiya stroitel'stva i arkhitektury. Institut betona i zhe-
lezobetona, Perovo.
(Floors) (Factories--Design and construction)

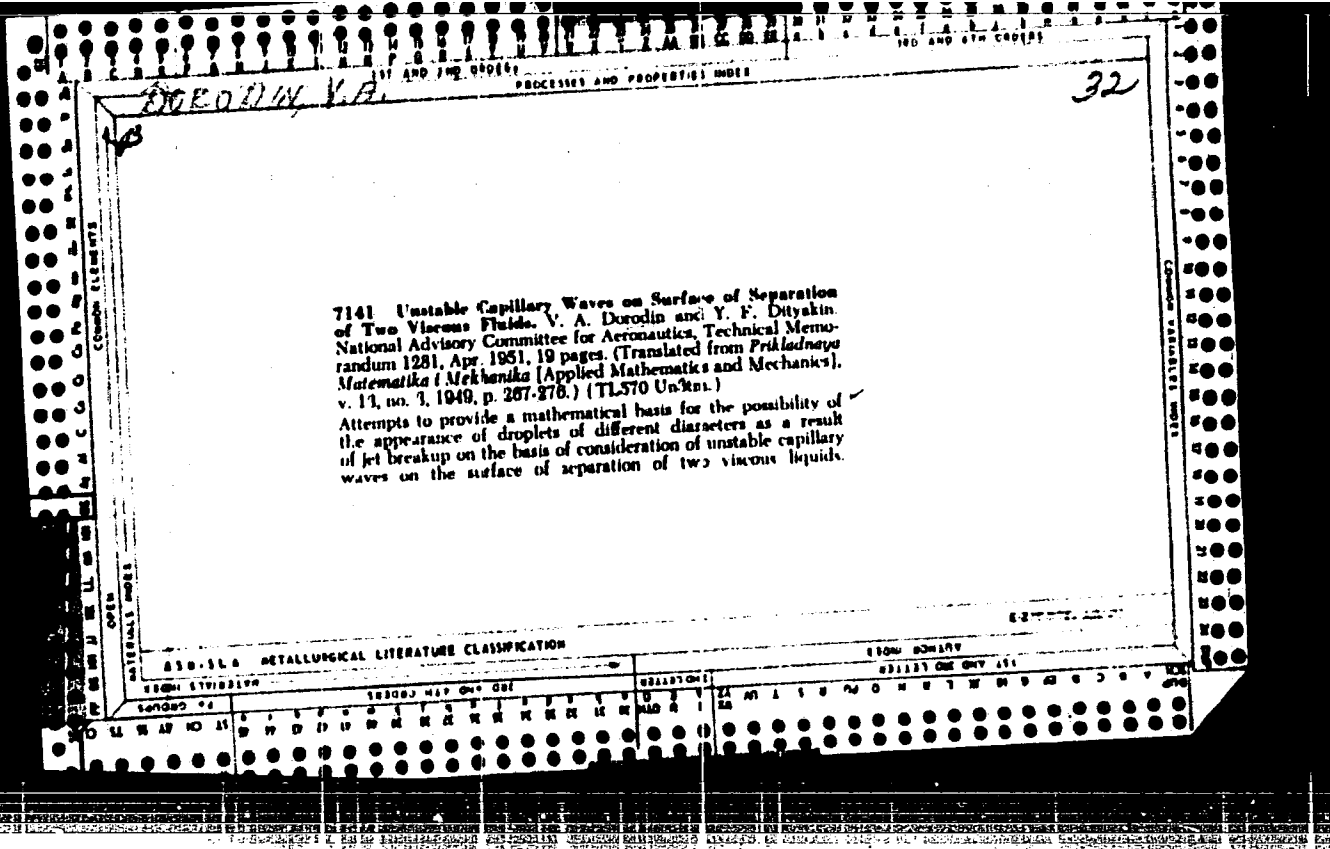
GLUSHKOV, V.M., *otv. red.*; KUKHTENKO, A.I., *zam. otv. red.*;
BLAGOVESHCHANSKIY, Yu.V., *red.*; DORODNITSYN, A.A., *red.*;
YERSHOV, A.P., *red.*; LYAPUNOV, A.A., *red.*; MOSKALEV,
I.S., *red.*; PUKHOV, O.Ye., *red.*; ROSTUNOV, T.I., *red.*;
SAMOKHVALOV, K.G., *red.*; STOONIY, A.A., *red.*; TIMOFEYEV,
B.B., *red.*; SHCHERBAN', A.N., *red.*; LETICHEVSKIY, A.A.,
red.; KAPITONOVA, Yu.V., *red.*; MEL'NIK, T.S., *red.*

[Problems of theoretical cybernetics] Voprosy teoretiches-
skoi kibernetiki. Kiev, Naukova dumka, 1965. 209 p.
(MIRA 18:9)

1. Akademiya nauk URSR, Kiev.

DORODNITSYN, A.A., akademik

Third Congress of the International Federation for Information
Processing held in New York. Vest. AN SSSR 35 no.12:76 D '65.
(MIRA 19:1)



DORODNITSYN, A. A.

"Concerning the Theory of a Daily Course of Temperature in a Mixed Stratum,"
Dok. AN 30, No. 5, 1941.

DORODITSYN, A. A.

Pogranichnyi sloi v szhiraenon gaze. (Prikladnaia matematika i mekhanika, 1942, v. 6, no. 6, p. 449-486, tables, bibliography) Summary in English.

Title tr.: On the boundary layer of a compressible gas.

QA801.F7 1942

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955

DORODNITZYN, A.

SA

533.6.011.311 2283
 Laminar boundary layer in compressible fluid.
 DORODNITZYN, A. *C.R. Acad. Sci. USSR* 31 (No. 8)
 213-19 (1942). — Making the simplifying assumption
 that Prandtl's number has the value unity, the author
 discusses mathematically the problem of the laminar
 boundary layer in the case of streamline flow of com-
 pressible fluid past a stream-lined body of arbitrary
 profile under the condition that there is no heat
 transfer between the body and the fluid. J. S. U. T.

A43

Cent. Inst. Aerodynamics

Barré

SA

2406. Theory of the combustion of mixed gases. 536.46
 YA. D. ZELDOVICH. *J. Tech. Phys. USSR* 16 1166

A55
k

DORODNITSYN, A.A.

Dorodnitsyn, A. A. Generalization of the lifting-line theory for cases of a wing with a curved axis and a slipping wing. Appl. Math. Mech. [Appl. Math. USSR. Prikl. Mat. Mech.] 8, 33-64 (1944). (Russian. English summary) [MF 11468]

The immediate application of the Prandtl lifting-line theory to the case of a slipping wing or a wing with a curved axis (swept wing) is impossible because the induced velocities calculated at the lifting-line are infinite. This investigation is based on the following method: The velocities are calculated not at the lifting-line itself, but in the neighborhood of this line, and then represented in form of a series in terms of $e^{-r/l}$, where r is the distance from the lifting-line in the plane of the section of the wing considered and l is the span. In the general case this series contains, besides a constant term, a logarithmic one, which tends to infinity when $r \rightarrow 0$. The other terms of the series are of order $O(r^{1/2})$; hence they are negligible in the neighborhood of the wing for a large aspect ratio.

The circulation in some section of the wing is determined by these two main terms in the expression for the velocity. The part of the circulation produced by the constant term is determined by the ordinary Prandtl relation. In order to determine the part of the circulation produced by the logarithmic term it is necessary to solve the problem of flow with such a logarithmic singularity near the section of the wing. For the third power of the angle β of roll (or sweep) the logarithmic flow is potential in the plane of the section of the wing; hence the problem in question can be solved by means of the conformal representation of the wing section on a circle.

From the author's summary.

DORODNITSYN, A. A.

"The Boundary Layer in a Compressible Gas" Priklad. Matem i Mekhan. 6(4)(1945)

DORODNITSYN, A. A.

K teorii perekhoda laminarnogo sloia v turbulentnyi. (Prikladnaia matematika i mekhanika, 1945, v. 9, no. 4, p. 269-285, diagsr., bibliography)

Title te.: Theory of transition from the laminar layer to the turbulent.
CA801.P7 1945

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955

Dorodnicyn, A. A. Asymptotic solution of van der Pol's equation. *Appl. Math. Mech.* [Akad. Nauk SSSR. Prikl. Mat. Mech.] 11, 313-328 (1947). (Russian. English summary)

The author considers the periodic solution to van der Pol's equation

$$(*) \quad p \frac{dp}{dx} - v(1-x^2)p + x = 0, \quad p = dx/dt,$$

for large values of the parameter v . Four kinds of regions in the (x, p) -plane are defined in such a way that within each $(*)$ may be solved using asymptotic series in powers of $1/v$. The regions overlap one another so that an arc of $(*)$ may be pieced together around an entire half-cycle. Asymptotic series are obtained for the period and amplitude of the periodic solution.

Using a similar procedure, but in the Liénard plane, J. Haag [Ann. Sci. École Norm. Sup. (3) 60, 35-64, 65-111 (1943); 61, 73-117 (1944); these Rev. 7, 299] has already treated the equation $d^2x/dt^2 + v f(x) dx/dt + x = 0$. Dorodnicyn's regions I, II, III, IV correspond to neighborhoods of Haag's arcs of first kind, terminal points, arcs of second kind, and boundary points of first kind. The asymptotic series in I and IV are essentially those found by Haag in his corresponding regions. The present paper, although less general than Haag's, has the advantage of being much more concise.

E. Gilbert (Cambridge, Mass.)

Source: *Mathematical Reviews*, 1948, Vol. 9, No. 3

SMW R25

DOBOLINSKY, A. A.

K teorii perekhoda laminarnogo sloia v turbulentnyi. (Prikladnaia matematika i mekhanika, 1949, v. 9, no. 4, p. 260-285, diagra, bibliography)

Title tr.: Theory of transition from the laminar layer to the turbulent.
CAEOL.P7 1945

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955

1. DORODNITSYN, A. A.
2. USSR (600)
4. Physics and Mathematics
7. Planar Problems of Hydrodynamics and Aerodynamics, L. I. Sedov.
(Moscow-Leningrad, State Technical Press, 1950). Reviewed by
A. A. Dorodnitsyn, Sov. Kniga No: 9, 1951.

9. ~~Report~~ Report U-3081, 16 Jan. 1953, Unclassified.

1. DORODNITSYN, A. A.
2. USSR (600)
4. Physics and Mathematics
7. Methods of Theory of Functions of a Complex Variable, M. A. Lavrent'yev,
B. V. Shabat. (Moscow-Leningrad, State Technical Press, 1951)
Reviewed by A. A. Dorodnitsyn, Sov. Kniga, No. 7, 1952.

o. Report U-3081, 16 Jan 1953, Unclassified.

DORODNITSYN A.A.

Mathematical Reviews
Vol. 14 No. 9
October 1953
Analysis

Dorodnitsyn, A. A. Asymptotic laws of distribution of the characteristic values for certain special forms of differential equations of the second order. Uspehi Matem. Nauk (N.S.) 7, no. 6(32), 3-56 (1952). (Russian)
The author discusses the boundary-value problem

$$y'' + [\lambda r(x) + q(x)]y = 0, \quad a \leq x \leq b,$$
$$y(a) \cos \alpha - y'(a) \sin \alpha = 0,$$
$$y(b) \cos \beta + y'(b) \sin \beta = 0, \quad \alpha, \beta \text{ const.},$$

in certain cases when the classical Sturm-Liouville theory does not apply. There are four such cases:

- (i) $r(x) = (x-a)r_1(x)$,
- (ii) $r(x) = (x-a)(b-x)r_1(x)$,
- (iii) $r(x) = (x-c)r_1(x), \quad a < c < b$,
- (iv) $r(x) = (x-a)r_1(x), \quad \rho > -2$.

In all four cases it is assumed that $r_1(x)$ and $q(x)$ are bounded continuous functions on the closed interval (a, b) , and $r_1(x)$ is bounded away from zero there. Using Langer's method for finding asymptotic forms of the solutions of the differential equation for large λ , the author finds asymptotic forms of the characteristic values and characteristic functions of the boundary-value problems. Using these, he discusses the convergence of the bilinear expansions of the Green's functions of his problems. The theory is applied to several differential equations among which Mathieu's equation may be mentioned as being of considerable interest.

Side 2

Side 2

2/3

Paradigm, P. R.

The author also discusses in a similar manner a singular Sturm-Liouville problem in which the differential equation is of the form

$$xy'' + p(x)y' + [\lambda r(x) + q(x)]y = 0$$

p, q, r are continuous on the closed interval $(0, b)$, $r(x)$ is bounded away from zero there, no boundary condition may be prescribed at $x=0$, and the boundary condition at $x=b$ is $y(b) \cos \lambda + y'(b) \sin \lambda = 0$.

In the appendix various properties of the comparison functions (Bessel functions) are presented; these are not new.

A. Erdlyi (Pasadena, Calif.)

SM

.. KORODNITSYN A. A.

"Dependence of the curvature of the line of the compression jump on the curvature of the external surface of a body of revolution with a channel (hole) through it."

Relations are derived which govern the relation between the curvature of the line of the compression jump and the curvature of the meridional cross section for a solid of revolution with a channel for air flowing through it. The relation is determined which permits plotting the element of the line of the compression jump in the neighbourhood of the front edge which is necessary for calculating the pressure distribution along the external surface of the solid of revolution. (First published in 1949)

Symposium of Theoretical Work on Aerodynamics, Oborongiz, 1957, 3,000 copies, Central Aero-Hydrodynamics Inst. imeni Prof. N. Ye. Zhudovskiy.

DORODNITSYN A. A.

"Calculation of the pressure distribution along solids of revolution
inside a supersonic gas flow."

At present two methods exist for calculating the pressure distribution along solids of revolution, one based on the linearised motion equations and the other based on applying the characteristics. In this paper a third method is proposed which is based on approximate integration of the equations of the characteristics of an axis-symmetrical flow. From the point of view of practical application, this method is simpler than that based on the linear theory. Comparison of the results with those of accurate solutions proved that the accuracy of this method is adequate.

(First published in 1949)

Symposium of Theoretical Work on Aerodynamics, Oborongiz, 1957, 3,000 copies,
Central Aero-Hydrodynamics Inst. imeni Prof. N. Ye. Zhudovskiy.

89551

S/044/60/000/008/023/035
C111/C222

10-6120

16.7600
AUTHOR:

Dorodnitsyn, A.A.

TITLE:

Some cases of axisymmetric supersonic gas flows

PERIODICAL:

Referativnyy zhurnal. Matematika, no.8, 1960, 112,
abstract no. 8981. Sb. teor. rabot po aerodinamike. M.,
Oborongis, 1957, 77-88

TEXT: Relations for the characteristics of the first and second family for the case of an axisymmetric flow are obtained in the paper "Calculations of the distribution of pressure on the bodies of revolution in a supersonic gas flow" (of. this collected volume, p.116). With the aid of the independent variables ξ and η , where $\xi(x,r) = \text{const}$ are the characteristics of the first family, and $\eta(x,r) = \text{const}$ are the characteristics of the second family, for the case of constant entropy these relations are reduced to the system of four partial differential equations

$$\frac{\partial r}{\partial \eta} = \frac{1}{g}(\nu + \alpha) \frac{\partial x}{\partial \eta},$$

$$\frac{\partial}{\partial \eta}(\nu - r) = - \frac{\sin \vartheta \cdot \sin \alpha}{\sin(\nu + \alpha)} \cdot \frac{\partial}{\partial \eta} \ln r, \tag{1}$$

Card 1/3

89551

Some cases of axialsymmetric....

S/044/60/000/008/023/035
C111/C222

$$\frac{\partial r}{\partial \xi} = \operatorname{tg}(\vartheta - \alpha) \frac{\partial x}{\partial \xi},$$

$$\frac{\partial}{\partial \xi}(\vartheta + f) = \frac{\sin \vartheta \cdot \sin \alpha}{\sin(\vartheta - \alpha)} \frac{\partial}{\partial \xi} \ln r,$$

with the unknown functions r, x, ϑ, f .

Here x -- abscissa, r -- distance from the axis of symmetry, ϑ -- angle formed by the velocity with the axis Ox , α -- Mach angle

$$\left(\operatorname{tg} \alpha = \frac{1}{\sqrt{M^2 - 1}} \right),$$

$$f(\alpha) = \sqrt{\frac{K+1}{K-1}} \left[\frac{\pi}{2} - \operatorname{arc} \operatorname{tg} \left(\sqrt{\frac{K+1}{K-1}} \operatorname{tg} \alpha \right) \right] - \left(\frac{\pi}{2} - \alpha \right).$$

If the initial data on two characteristics are given by

$$r = r_0(\eta), \quad x = x_0(\eta), \quad \vartheta = \vartheta_0(\eta), \quad f = f_0(\eta) \quad \text{for } \xi = 0 \quad (2)$$

$$r = R_0(\xi), \quad x = X_0(\xi), \quad \vartheta = \theta_0(\xi), \quad f = F_0(\xi) \quad \text{for } \eta = 0, \quad (3)$$

and $r_0(\eta), x_0(\eta)$ are analytic in $0 \leq \eta \leq \eta_0$, while $R_0(\xi), X_0(\xi)$

Card 2/3

89551

S/044/60/000/008/023/035
C111/C222

Some cases of axialsymmetric...

are analytic in $0 \leq \xi \leq \xi_0$ then the solutions of the system (1.7) are sought in the form

$$\ln r = \ln r_0(\eta) + \sum_1^{\infty} \lambda_n(\eta) \xi^n, \quad \vartheta = \vartheta_0(\eta) + \sum_1^{\infty} \vartheta_n(\eta) \xi^n,$$

$$x = x_0(\eta) + \sum_1^{\infty} x_n(\eta) \xi^n, \quad r = r_0(\eta) + \sum_1^{\infty} r_n(\eta) \xi^n. \quad (4)$$

After substituting (4) into (1) one obtains a system of ordinary linear differential equations for the determination of $\lambda_n, x_n, \vartheta_n, r_n$. In the case where the initial data on $\xi = 0$ are given by (2), and the form of the body behind the characteristic is known then the solution is sought in the form (4) too.

Since the calculation of a great number of coefficients for (4) is difficult, the author proposes an approximate method for the calculation which is described in the mentioned paper. As an example the author considers the problem of the flow around of a body of revolution consisting of a cylinder which begins to narrow with a folding generating line.

[Abstracter's note: The above text is a full translation of the original Soviet abstract.]

Card 3/3

31579
S/124/61/000/011/018/046
D237/D305

10,1300

AUTHOR: Dorodnitsyn, A.A.

TITLE: Laminar boundary layer in a compressible gas

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 11, 1961, 81,
abstract 11B551. (Sb. teor. rabot po aerodinamike M.
Oborongiz, 1957, 140 - 173)

TEXT: A method is worked out for solving equations of a compressible boundary layer in the absence of heat transfer, constant Prandtl number and arbitrary dependence of viscosity on temperature. The method is based on the application of integral relations. In the absence of heat transfer, the energy equation in its integral form can be integrated by definite integrals which allows insertion of single parameter velocity and temperature profiles in the impulse equation. The magnitude $\lambda_1 = \mu'_0 \delta^{**2} / v_{\infty} \tau_0$ where $\mu'_0 =$ velocity gradient on the inner boundary of the layer, $v_{\infty} =$ kinematic viscosity at the stagnation temperature on the inner boundary;

X

Card 1/3

Laminar boundary layer in a ...

31579
S/124/61/000/011/018/046
D237/D305

τ_0 = ratio of the temperature on the boundary of the layer to stagnation temperature, δ^{**} = thickness of loss of impulse, are chosen as form-parameters. Also, given profiles depend on Mach and Prandtl numbers. To obtain velocity and temperature profiles, solutions were given for a laminar boundary layer for specific aspects of the function $u_0(\xi)$ where ξ = a given coordinate by the author along the surface of the body. For positive values of the parameter λ_1 , the solution of the case $u_0 = C_1\xi + C_3\xi^3$ (C_1 and C_3 are constants) is utilized. This solution is obtained by expanding into series

$k = C_1^3/2i_0C_3$ and $\gamma = C_3\xi^2/C_1$ (i_0 = stagnation enthalpy of the inner flow) and the solution reduces, analogically to the Blasius method, to solving a recurrent system of ordinary differential equations. Results are given of numerical solution of a part of these equations for the Prandtl number $P = 14/19$, assuming that the dependence of air viscosity on temperature can be given approximately as $\mu/\mu_{00} = \tau[1 + a(1 - \tau)]$, where μ_{00} = air viscosity at the stagnation temperature T_{00} of the inner flow, τ = ratio of local temperature to T_{00} ($a \approx 0.3$ at $T_{00} = 500^\circ\text{K}$). For $\lambda_1 = 0$, the solution is

Card 2/3

Laminar boundary layer in a ...

31579
S/124/61/000/011/018/046
D237/D305

utilized of the case of a flat plate which is obtained by expansion into the power series of a , where the first term of this expansion corresponds to the case of linear dependence of viscosity on temperature. Results are given of a numerical solution of equations corresponding to the 1st power of a . In this case the Mach number enters the solution only in the coefficients of tabulated functions. For negative values λ_1 profiles are utilized which corresponds to the linear change of inner velocity $u_0 = b_0 + b_1 \xi$, ($b_0, b_1 > 0$). Solution of equations of a boundary layer in this case is found by power expansion of $k = b_0^2/21_0$ and $s = b_1 \xi/b_0$ and reduces to solving the recurrent system of ordinary differential equations part of which was solved for $\mu/\mu_{00} = \tau$ and $P = 14/19$. Solutions obtained for the above cases are used to find the dependence of functions appearing in an integral impulse relation on λ_1 . Analogically with the Kochin-Loytsyanskiy method for incompressible fluid, the solution of integral impulse equation reduces to calculating quadratures. [Abstractor's note: Complete translation].

Card 3/3

AUTHOR: DORODNITSYN, A.A. PA - 2455
TITLE: Computing Center of the Academy of Science of the U.S.S.R.
(Vychislitel'nyy tsentr Akademii Nauk SSSR)
PERIODICAL: Vestnik Akademii Nauk SSSR, 1957, Vol 27, Nr 1, pp 9 - 12
(U.S.S.R.)
Received: 5 / 1957 Reviewed: 5 / 1957

ABSTRACT: In spite of the fact that High-speed computers computing several ten or hundred thousand times faster than a qualified employee, antiquated methods of calculation have lead to the situation that the application of computers is very rare and used only in the preparatory work of scientific research and for the determination of parameters in technical projects.

The application of computers has proved to be of great importance in scientific research centers and engineering departments. The first computing center was put into operation in March 1955 at the Academy of Science of the U.S.S.R. At the present moment the high-speed electronic computer BESM and a computer "Stryela-3" (arrow 3) is available at the center. This computing-center at present performs a great number of various scientific calculations and also performs work by order.

For example, in 1955 BESM performed work which would have necessitated the employment of tenthousand people during

Card 1/2

PA - 2455

Computing Center of the Academy of Science of the U.S.S.R.

20 years, although the entire staff of the center numbers only 250 persons.

It would be very important to issue a good periodical concerned with this matter. The computing center, however, encounters great difficulties in this respect competent for this field shows little progress considering the fact that it takes the Academy of Science one year to publish one edition of the periodical on applied Mathematics. There is good reason to hope- however, that 1957 will prove to be the turning-point in this matter, because a great number of computers will be built, and therefore this deficiency should be mended as soon as possible. (1 illustration)

ASSOCIATION: Not given

PRESENTED BY:

SUBMITTED

AVAILABLE: Library of Congress.

Card 2/2

YERSHOV, Andrey Petrovich; DOBODNITSYN, A.A., akademik, otvetstvennyy red.;
SHTYINBOK, G.Yu., red. izd-va; POLYAKOVA, T.V., tekhn. red.

[Programming for high-speed electronic calculating machines]
Programmiruiushchaya programma dlia bystrodeistvuiushchei elektron-
noi schetnoi mashiny. Moskva, Izd-vo Akad. nauk SSSR, 1958. 115 p.
(Programming (Electronic computers)) (MIRA 11'8)

KITOV, Anatoliy Ivanovich; KRINITSKIY, Nikolay Andreyevich; DORODNITSYN,
A.A., akademik, otv.red.; PROKOF'YEVA, N.B., red.izd-va; POLYAKOVA,
T.V., tekhn.red.

[Electronic calculating machines] Elektronnye vychislitel'nye
mashiny. Moskva, Izd-vo Akad.nauk SSSR, 1958. 130 p. (MIRA 12:4)
(Electronic calculating machines)

DORODNITSYNA, A.A., kand.biol.nauk; SAVINICH, F.K.; SHPELEV, Ye.Ya.,
podpolkovnik meditsinskoy sluzhby

Influence of lowered barometric pressure on human tolerance for
high temperatures. Voen.-med.zhur. no.8:56-58 Ag'58.

(MIRA 16:7)

(ALTITUDE, INFLUENCE OF) (HEAT—PHYSIOLOGICAL EFFECT)

DORODNITSYN, A. A. (Prof.)

"Some Contributions to the Solution of Mixed Problems of Transonic Flow."
Paper presented at the First International Congress of the Aeronautical Sciences, Madrid,
8-13 Sept 1958.

classification

EVID - B-3, 115, 493

DORODNITZIN, A. A.
(Anatoliy Alekseyevich)

UNESCO/NS/ICIP/ABSTRACT/D.1.14

THE USE OF HIGH-SPEED DIGITAL COMPUTERS FOR THE SOLUTION OF
PARTIAL DIFFERENTIAL EQUATIONS

A. A. DORODNITZIN

Academy of Sciences, Moscow, USSR

The solution of partial differential equations is a very important stage in scientific investigations and in technical designing.

The modern digital computers permit to solve complicated systems of nonlinear equations which practically were not soluble by the use of old computing technique.

In the solution of hyperbolic systems of partial differential equations two methods are successfully used - the method of characteristics and the method of finite differences.

In the last case special attention must be paid to the stability of calculations.

For the elliptical, parabolical and mixed systems as the experience showed, the methods of reducing from partial differential equations to systems of ordinary differential equations (method of straight-lines, method of integral relations) are very convenient, because they do not require too large computer's memory.

In the report some examples of solution of concrete non-linear problems are given.

PAPER PRESENTED AT INTERNATIONAL CONF. ON INFORMATION PROCESSING
UNESCO HOUSE, PARIS 15 - 20 JUNE 1959

Name : DORODNITSYN, A. A.
Title : Academician
Remarks : In a short statement published in an article entitled "What the Scientists Are Saying", A. A. Dorodnitsyn discusses the first Soviet moon rocket and the possibility of launching a manned rocket sometime in the future.
Source : N: Komsomol'skaya Pravda, No. 3, 4 January 1959, p. 3, c. 1

20.

16(1)

AUTHOR:

Dorodnitsyn, A.A., Academician

SOV/20-126-6-4/67

TITLE:

A Contribution to the Problem of Computing Eigen Values and Eigen Vectors of Matrices

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 6,
pp 1170 - 1171 (USSR)

ABSTRACT:

Let a symmetric matrix $C = A + \epsilon B$ of order n be given. The eigen values and eigen vectors of A are assumed to be known. If the eigen vectors and eigen values are considered as functions of ϵ , then it is

$$(1) \quad (A + \epsilon B) \vec{x}_1(\epsilon) = \lambda_1(\epsilon) \vec{x}_1(\epsilon) \quad (\vec{x}_1(\epsilon) \cdot \vec{x}_1(\epsilon)) = 1$$

where \vec{x}_1 is a normed eigen vector corresponding to λ_1 .

After differentiation one has

$$(2) \quad (A + \epsilon B) \frac{d \vec{x}_1}{d \epsilon} + B \vec{x}_1(\epsilon) = \lambda_1(\epsilon) \frac{d \vec{x}_1}{d \epsilon} + \frac{d \lambda_1}{d \epsilon} \cdot \vec{x}_1;$$

$$(3) \quad \left(\vec{x}_1 \cdot \frac{d \vec{x}_1}{d \epsilon} \right) = 0$$

Card 1/3

A Contribution to the Problem of Computing Eigen
Values and Eigen Vectors of Matrices

SOV/20-126-6-4/67

If for a given ϵ all λ_i are different, then $d\lambda_i/d\epsilon$ and $d\vec{x}_i/d\epsilon$ are finite, so that

$$(\vec{x}_i \cdot (\frac{d\lambda_i}{d\epsilon} \vec{x}_i - B \vec{x}_i)) = 0$$

i.e.

$$(4) \quad \frac{d\lambda_i}{d\epsilon} = (\vec{x}_i \cdot B \vec{x}_i)$$

and because of (3) :

$$(5) \quad \frac{d\vec{x}_i}{d\epsilon} = \sum_k \frac{(\vec{x}_k(\epsilon) \cdot B \vec{x}_i(\epsilon))}{\lambda_i(\epsilon) - \lambda_k(\epsilon)} \cdot \vec{x}_k(\epsilon) \quad , \quad i \neq k .$$

Therefore the eigen values and eigen vectors satisfy the system (4), (5) which can be integrated e.g. according to the Euler method.

Card 2/3

A Contribution to the Problem of Computing Eigen
Values and Eigen Vectors of Matrices

SOV/20-126-6-4/67

From these considerations the author obtains several numerical
schemes for the determination of eigen numbers and eigen
values.

SUBMITTED: April 17, 1959

Card 3/3

DORODNITSYN, A. A.

"Generalized Method of Integral Relations and its Application to the
Theory of Boundary Layer."

report presented at the 2nd International Congress of the International Council of
Aeronautical Sciences, Zurich, Switzerland, 12-16 Sep 60