RAIKOV, I.B.

The nuclear apparatus of Remanella multinucleata Kahl (Ciliata, Holotricha). Acta biol Hung 14 no.3:221-229 '63.

1. Laboratory of Protozoan Cytology, Institute of Cytology of the Academy of Sciences of the U.S.S.R., Leningrad (Head: G. Poljansky)[Polzhanskiy, G.].

*

GERASIMOV, M.; RUSCHEV, D.; RAIKOV, Kr.; BRANIAKOV, L.

Preparation of bitumen emulsions for road construction.
Godishnik khim tekh 8 no.1:183-203 '61 [publ. '62].

MIKHAILOV, K., inzh.; VELCHEV, St., inzh.; STANEV, St., arkh.; TSVETKOV, V., inzh.; VELKOV, As., ikon.; GUDEVA, Zh., inzh.; SOTIROV, Iv., inzh.; TSONEV, D., inzh.; KHRISTOVA, S., inzh.; RAIKOV, Il., inzh.; KOSTADINOV, V., inzh.

Current problems of urban electrical engineering. Elektroenergiia 16 no.1:3-7 Ja '65.

RAIKOV, Kh.; RACHEVA, R.; IVANOVA, S.

Our care for calves. p.22. For a larger number of healthy calves. Tr. from the Russian p.23.
(Kooperativno Zemedelie Vol. 10, no. 8, Aug, 1955, Sofiya)

SO:Monthly List of East European Accessions, (EEAL). LC, Vol. 4, No. 11, Nov. 1955, Uncl.

RAIKOV, L.

The one-piece flexible girder fastened in a pressed chain in railroad bridges. A fifty-meter chimney made from prefabricated reinforced-concrete blocks. Tr. from the Russian.

pages 4-7 (STROITELSTVO) Vol. 4, no. 6, 1957,
Sofiia, Bulgaria

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

VESHOV, D., inzh.; RAIKOV, Kr., inzh.

On the scientific application of bitumen in highway construction.
Stroitelstvo 9 no.4:17-20 Jl-Ag '62.

MILCHEVA, M.; RAIKOV, L.

Extent of the P^{32} phosphorus secondary fixation determined in the process of preparing soil extracts. Iav Inst "Nikola Pushkarov" 6:85-91 '63.

[illegible], Ts., prof. d-r; GALEVA, V., d-r; PALAVEEV, V., d-r; RAIKOV, L.

Prof. Tsvetan Staikov, Corresponding Member of the Bulgarian Academy of Agricultural Sciences, is sixty. Izv. Inst "Nikola Pushkarov" 7:5-6 '63.

1. Chlenovi na Redaktsionnata kolegiia, "Izvestiia na Instituta za poznavoznanie i agrotekhnika 'Nikola Pushkarov'".

BEKHAR, A.; RAIKOV, L.

Clay minerals and general chemical composition of saline and nonsaline soils. Izv Inst "Nikola Pushkarov" 7:115-124 '63.

1. Chlen na Redaktsionnata kolegiia, "Izvestiia na Instituta za pochvoznanie i agrotekhnika 'Nikola Pushkarov'" (for Raikov).

RAIKOV, L., st. n. sutr.; BEKHAR, A.

Saline soil at the village Belozem, district of Plovdiv.
Izv Inst "Nikola Pushkarov" no.3:25-58 '62.

1. Chlen na Redaktsionnata kolegiia, "Izvestiia na Tsentralniia nauchnoizsledovatelski institut po pochvoznanie i agrotekhnika 'Nikola Pushkarov'" (for Raikov).

RAIKOV, L., st. n. sutr.

A symposium on the use of marked atoms in pedology. Priroda Bulg 11 no. 6:95-96 N-D '63.

1. Tsentralen nauchnoizsledovatelski institut po pochvoznanie i agrotekhnika "N. Pushkarov".

RAIKOV, L.
"Soil and irrigation" (p.23) PRIRODA
(Bulgarska Akademiia Na Naukite) Sofiya Vol 3 No 1 Jan/Feb 1953

SO: East European Accessions List Vol 2 No 6 Aug 1954

RAIKOV, L.

"V. V. Dokuchaev, Creator of Soil Science." p. 79 (PRIRODA, Vol. 2, No. 4, July/Aug., 1953, Sofiya.)

SO: Monthly List of East European Accessions, Library of Congress, / Vol. 3, No. 3 March 1954 ~~1953~~, Uncl.

RAIKOV, P.

Content of copper in the products of confectionary enterprises. p. 11
(Leka Promishlenost, Vol. 5, no. 12, 1956, Bulgaria)

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

Naikov P.N.

PROFESSOR P. N. NAIKOV

TECHNOLOGY

Periodical: KHIMIIA I INDUSTRIIA. Vol. 30, no. 5, 1958

PROFESSOR P. N. NAIKOV. One of the founders of the Sofia State University.
p. 155.

Monthly List of Last European Accession (LEAI), LC., Vol. 8, no. 2,
February 1959, Unclass.

TSENOVA, A., inzh.; PAVLOV, P., inzh.; RAIKOV, R., inzh.

The Dospat-Krichim waterfall. Elektroenergiia 14 no.2:1-7 F '63.

RAIKOV, B.

"Compensative regulation of electric-power production."

p. 3 (Elektroenergiia, Vol. 9, no. 1, 1958, Sofiia, Bulgaria)

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

RAIKOV, R., prof.

Surgical therapy of cardiospasm. Khirurgiia, Sofia 14 no.2/3:354-355 '61.

(CARDIOSPASM surg)

[illegible]

MAIKOV, K. Mechanization of work in low-voltage industry. p. 47.

Vol. 9, No. 5, Sept./Oct. 1956.
ELEKTRIFIKATSIYA.
ELEKTROTEKHNIKA
Sofiia, Bulgaria

So: East European Accession, Vol. 6, No. 3, March 1957

STOIANOV, Marko, inzh.; RAIKOV, Raiko, inzh.

The Sandanska Bistritsa Rapids. Elektroenergiia 15 no.5:2-6 My '64

MIKHAILOV, Mikhail; RAIKOV, Raiko

Possibilities for automatic adjustment of the position of tractor-mounted plows to the relief in the vertically longitudinal plane. Izv mekh selsko stop BAN 4 97-106 '63.

RAIKOV, S.

Results from technical standardization in the furnace section of the V. Kolarov State Cement Plant. p. 55.
Heavy industry in Czechoslovakia during the Second Five-Year Plan. p. 59.
Heavy industry in Hungary during the Second Five-Year Plan. p. 60.
Successes of heavy industry in Yugoslavia. p. 61.
Japanese chemical industry. p. 61

KHIMIA PROMISHLENOST. Vol. 5, no. 5, 1956

Sofiia, Bulgaria

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 6, No. 1, January 1957

RAIKOV, S.

Overexpenditure must not be allowed with the "working wages" fund of the Mining Enterprise for Nonmetallic Minerals. p. 78. Vol. 10, No. 3, May/June 1955. MINNO DELO. Sofiya, Bulgaria.

SOURCE: East European Accessions List, (EEAL) Library of Congress, Vol. 5, No. 1, January, 1956.

DIMITROV, R., d-r; RAIKOV, Ts.; PETKOV, Iv.

Methods of testing and computing the noble and rare metals and dispersed elements in the nonferrous-metal ores in Bulgaria. Min delo 17 no.7:22-24 Jl '62.

1. Upravlenie "Geolozhki prouchvaniia i okhrana na zemnite nedra".

RAIKOV, T.

Inhabitants of Zempoaltepetl Mountain in Mexico.

P. 16, (Geografiia) Vol 7 no. 6, 1957, Sofia, Bulgaria

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No.11 November 1957

RAIKOV, V.

Lifesaving of the drowning. The road of Mikhail Margolin, a revolver con-
ctructer.

pages 22-23 (ZA RODINATA) Vol. 7, no. 7, July 1957,
Sofiia, Bulgaria

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

RAIKOVA, Bl.

Pollution of the air over Sofia with sulfur oxide.
Khidro i meteorolog 13 no. 2:45-50 '64.

RAIKOVA, D.

New hypotheses on the solar activities. Nauka i tekh mladezh 16 no.1: 41-44 Ja'64.

ZIDAROV, D.; RAIKOVA, D.

Eliminating disturbing effect of the walls in electrolytic baths. Doklady BAN 15 no.3:261-264 '62.

1. Note présentée par L. Krastanov [Krustanov, L.], membre de l'Académie, membre du Comité de rédaction et rédacteur responsable, "Doklady Bolgarskoy Akademii Nauk."

RAIKOVA, D.

Celestial omens. Nauka i tekh mladezh 16 no.12:19-24 '64.

RAIKOVA, Donka, d-r

The star path. Nauka i tekh mladezh 14 no.12:22-23 '62.

1. Astronomicheska sektsiia bri Bulgarskata akademiia na mukite.

MANOLACHE, Mircea, conf. ing.; BODEA, Ion, asistent ing.; RAILEANU, Dumitru, asistent ing.; SAS, Ion, asistent

Corrosion of aluminum and its alloys. Metalurgia constr mas 8 no.11: 937-950 N '61.

(Corrosion and anticorrosives)
(Aluminum alloys)

R/009/61/000/011/001/001
D282/D303

AUTHORS: Manolache, Mircea, Instructor, Engineer, Bodea, Ion, Assistant, Engineer, Răileanu, Dumitru, Assistant, Engineer, and Sas, Ion, Assistant

TITLE: On the corrosion of aluminum and its alloys

PERIODICAL: Metalurgia şi construcţia de maşini, no. 11, 1961, 937-950

TEXT: The article presents the results of experiments by the authors on the corrosion of aluminum and aluminum-alloy sheets in the various conditions of the Galati and Constanta harbors. The authors used in their experiments commercial aluminum of the following composition: 0.05% Fe, 0.31% Zn, 0.03% Mg, and the rest aluminum, as well as aluminum alloyed with 5% Cu and 3% Zn. Commercial aluminum was rolled into 1.5 - 2 mm thick sheets, while aluminum alloy into 4 - 6 mm thick sheets. The following

Card 1/5

On the corrosion ...

R/009/61/000/011/001/001
D282/D303

corrosion media were selected: (1) Danube water; (2) Danube atmosphere; (3) Black Sea water; (4) Black Sea atmosphere; (5) town atmosphere of Galati; and (6) Sea water brought into the laboratory. Since in ship or harbor constructions the aluminum generally comes into contact with other materials, the authors selected the following contact hypotheses: (1) without any contact to other material; (2) in contact with OL 38 steel; (3) in contact with copper; (4) in contact with bronze mixed with tin; (5) in contact with fir-wood; (6) in contact with zinc; and (7) in contact with oak-wood. The samples were tested with or without protection, i.e. (1) without any protection; (2) anodically oxidated; (3) painted, and (4) anodically oxidated and painted. The results obtained by the authors completely verified the modern corrosion theories. Thus, in case of commercial aluminum, an anodic dissolution was produced on the samples. This anodic dissolution was increasingly reduced due to a passivity process. In case of samples made from aluminum alloyed with Cu and Zn, the corrosion velocity permanently increased due to the action of

Card 2/5

On the corrosion ...

the cathodic inclosures. A general passivity of the metal or alloy is only produced if there are some conditions of an anodic passivity of the anodic components. Knowing the appearance mechanism of the anodic passivity, the potential up to which the anode has to be polarized, can be calculated. Preliminarily oxidated aluminum samples were more electronegative; the potentials tended towards a stability, i.e. passivity; and the dissolution current had an increasing tendency. In case of aluminum samples alloyed with Cu and Zn, the potential and the current had a continuously increasing tendency. The powerful corrosion of the alloyed samples which in some cases even led to pitting, was especially due to an increase of the number and size of the cathodic inclosures. The corrosion of the commercial aluminum samples was characterized by a surface corrosion, while that of the aluminum-alloy samples by an intercrystalline corrosion. The most powerful corrosion effect on commercial aluminum samples was exerted by Black-Sea-water, while on aluminum alloy samples

Card 3/5

R/009/61/000/011/001/001
D282/D303

On the corrosion ...

by Black-Sea and Danube waters. The average corrosion depths in the case of commercial aluminum samples was 60 μ , while in case of aluminum alloy samples it was almost 0.5 mm. However, the corrosion process did not vary proportionally with the time. The corrosion velocity increased the longer the aluminum alloy samples were kept in the corroding media, and decreased the longer the commercial aluminum samples were subjected to the activity of the corroding media. The authors draw the following preliminary conclusions: (a) Commercial aluminum is less corroded than aluminum alloyed with Cu and Zn. (b) The most powerful corrosion is produced by Black-Sea water, followed by Danube water. Sea water in the laboratory produced corrosions similar to corrosions produced by the sea-atmosphere. (c) Protecting layers have only delayed the corrosion of all samples submerged in natural waters, but proved to be more efficient in the case of samples subjected to atmospheric corrosion. (d) Generally, the contact materials increased the corrosion effects

Card 4/5

on the samples. (e) Most powerful corrosions were found on samples in contact with copper and bronze. (f) The decreasing order of the influence of the contact material on aluminum and aluminum-alloy samples, independently of the corroding media, was: copper, bronze, fir-wood, oak-wood, steel and zinc.(g) Zinc delayed the corrosion of aluminum and aluminum-alloys. The corrosion of all samples in the atmosphere was generally weak, superficial and uniform, being more powerful under a contact material. Red-lead proved to be a good protecting layer. Anodically oxidated and painted samples were not at all corroded, while painted samples were slightly corroded especially when being in contact with copper and bronze. There are 21 figures, 5 tables and 15 references: 11 Soviet-bloc and 4 non-Soviet-bloc. The reference to the English-language publication reads as follows: J. Sundarjan and T.L. Rama Char: " Inhibition of the Corrosion of Aluminum in Alkaline Solutions", Corrosion prevention and Control, 5, 1958, no. 5, 55-56.

Card 5/5

CIORANESCU, Ecaterina; RAILEANU, Gh.

Potential anticancer agents. Pt. 2. Rev chimie 8 no.1:21-29 '63.

1. Institute of Chemistry of the Academy of the R.P.R. Bucharest.
2. Corresponding Member of the Academy of the R.P.R. (for Cioranescu).

ION, Ilie; BAILEANU, D. (Bucuresti)

"Geomorphology" by Gr. Posea, V. Velcea, L. Cojocaru. Reviewed by Ilie Ion, D. Baileanu. Natura Geografie 15 no.6:91 N-D '63.

RAILEANU, D.; MENITESCU, C.D., [illegible]

Synthesis of some 5,6,7-trimethoxy-indole derivatives.
Studii cerc chim 11 no.1:19-36 '63.

1. Sectia de chimie organica a Centrului de cercetari chimice al Academiei R.P.R., Bucuresti.

NENITSESKU, K.D. [Nenitzescu, C.D.] (Bucharest); NOVITSANU, D. [Raileanu, D.]; ANGELIDE, N. [Angelide, N.]

New synthesis of the ester of 3-indolylpyroracemic acid. Rev chimie 8 no.1:59-63 '63.

1. TSentr khimicheskikh issledovaniy Akademii RNR Otdel organicheskoy khimii, Bukharest.

RAILEANU, G. ; RADALUTA, A.

Study of the fauna of Aptychus in the calcaria of the superior Jurassic of the Svinita-Svinicea Mare zone. p. 223.
(ANALELE. SERIA STIINTELOR NATURII, Rumania. Vol. 5, no. 11, 1956)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no.7, July 1957, Incl.

RAILEANU, Gr.; RUSU, A.

Contributions to the knowledge of the Lower Carboniferous from the Drencova area (Banat). Studii cerc geol 7 no.3/4:401-408 '62.

RAILEANU, Gr., [illegible], S., [illegible], C.

New data on the western tectonic boundary of the Resita (Banat) area. Rev geol geog Rum 7 no. 2: 199-202 '63.

RAILEANU, Gr.; NASTASEANU, S.; BOLDUR, C.

New data on the west tectonic limit of the Resita zone (Banat).
Studii cerc geol 8 no.1:7-11 '63.

1. Communicare prezentata de academician G. Murgeanu.

RAILEANU, Gr.; NASTASEANU, S.

On the presence of a form of Arthrophycus alleghaniensis (Harlan) in the Transylvanian Alps. Communicarile AR 13 no.5:439-443 My '63.

1. Comunicare prezentata de academician M.G. Filipescu.

RAILEANU, Gr.; IONDAN, Magdalena

Study on the Liassic brachiopods in the Svinita region. Studii cerc geol 9 no.1:3-24 '64

1. Chair of Geology of the Faculty of Geology and Geography of the Bucharest University.

RAILEANU, Gr.; POPESCU, Gh.

Micropaleontologic study of the Lower Cretaceus at Svinita (Southern Banat). Studii cerc geol 9 no.1:51-60 '64

1. Institute of Geology and Geography of the Rumanian Academy, Bucharest.

RAILEANU, Gr.; NEGULESCU, V.

Comparative study of the Burdigalian fauna in the Transylvania Basin and the Petroseni Basin. Anuarul Comit geol 34 pt.1:159-189 '64.

1. Submitted Janurary 1964.

RAILEANU, Gr.; RUSU, A.; MOISESCU, V.

Tectonic relations of the crystalline of the Maramures Mountains with sedimentary formations of the Transylvanian Basin. Rev. roum. geol. geof. geogr. 7:251-262 '63.

1. Geological Institute of the Geologic Committee and the Institute of Geology and Geography of the Rumanian Academy. Submitted June [illegible].

Gr. [illegible]

[illegible] of the Galic[illegible] in the Resita [illegible] good geof geogr [illegible] 2:2[illegible]75 '62.

[illegible] Faculty of Geology and Geography, University of Bucharest. [illegible], 1963.

NICULESCU, Ion T.; GAHGI-PARSCHIV, A.; ONICESCU, Doina; RAILEANU, Iona; GIUGARIU, D.; DEDIU, St.; OPRESCU-LISSIVIEVICI, Elena; TRIFU, P.

Contribution to the study of nerve endings in the pancreas. Rumanian M. Rev. 1 no.2:5-10 Apr-June 57.
(PANCREAS, innervation
anat. of nerve endings)

RUMANIA/Human and Animal Morphology (Normal [illegible]) S
Nervous System

Abs Jour : Ref Zhur - Biol., No 7, 1958, No 31227

Author : Niculescu Ion T, Hagi-Paraschiv A., Enachescu Aurelia, Badescu Ruxanda, Raileanu Ioana.

Inst : Not Given

Title : Concerning the Nerve Endings of the Digestive Apparatus: the Stomach and the Duodenum.

Orig Pub : Bul. stiint. Sec. med., 1956, 8, No 1, 101-150

Abstract : The stomach and intestine of dogs, cats, rabbits, rats and mice were stained with methylene blue; also used were impregnation with silver, Nissle body stain in different cytological methods. In the Auerbach system, the networks possess ganglia which lie under the serous membrane. Especially numerous are ganglia in the musculature of Oddi's sphincter. The ganglia are rich in blood vessels. Ganglictic cells of the Meissner plexus are smaller; they possess thinner synaptic apparatuses. In the muscle layer, at different pH values, the

Card : 1/2

HAGI-PARASHIV, A., Assit. Prof.; ENACHESCU, A.; ONICESCU, Doina; SMOLENSCHI-POTIN, Ludmila; BOCIRNEA, C.; LISSIEVICI-OPRESCU, Elena; MEDIU, St.; RAILEANU, Ioana; RADU, Sorina

Contributions to the study of terminal nerve structures in the peritoneum. Rumanian M. Rev. 2 no.2:9-10 Apr-June 58.

(PERITONEUM, innerv.
terminal nerve structures)

NICULESCU, I.T.,; PARASCHIV, Hagi, A.,; ENACHESCU, Aurelia,; BADESCU, Ruxandra,; RAILEANU, Ioanna.

Study of the nerve endings of the liver and bile ducts. Bul. stiint. sect. med. 7 no.2:609-620 Apr-June 55

(LIVER, innervation
nerve endings, in exper. animals, histol.)
(GALLBLADDER, innervation
nerve endings, in exper. animals, histol.)
(BILE DUCTS, innervation
nerve endings in exper. animals, histol.)

NICULESCU, Ion, T., membru corespondent al Academiei R.P.R.;
HAGI-PARASHIV, A.; ENACHESCU, Aurelia; BADESCU, Ruxanda;
RAILEANU, Ioana

The nerve endings of the digestive tract: stomach and duodenum.
Bul. stiint. sect. med. 8 no.1:101-150 Jan-Mar 56.

(NERVE ENDINGS
of stomach & duodenum, in various animals)
(STOMACH, innervation
nerve endings, in various animals)
(DUODENUM, innervation
neve endings, in various animals)

BERCEANUM, St.; GOCIU, Mariana; RAILEANU, Ioana

Studies of the behavior of hematopoietic cells in tissue culture. Stud. cercet. med. intern. 6 no.1:25-29 '65.

RAILEANU, L.

Quality of products in state and cooperative commerce. p. 20.

Vol. 8, no. 1, Jan 1956
STANDARDIZARE
Bucuresti, Rumania

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

RAILEANU, M.

3

JAJ(NB)

Preparation of phenothiazine 5-oxide. C. Bodea and M. Răileanu (Acad. R.P.R., Cluj, Romania). *Acad. rep. populare Romîne, Filiala cluj, Studii cercetări chim.* 11, 129–33(1960).—Optimal conditions for prepg. phenothiazine (Ia) 5-oxide (I) from *N*-benzoylphenothiazine (II) were investigated, and a synthesis of I was achieved. II, obtained from 50 g. Ia and 32.5 cc. BzCl, was treated in 500 cc. AcH with 62.5 cc. HNO_3 (d 1.5), the mixt. agitated 10 min., and poured into H_2O to yield *N*-benzoylphenothiazine 5-oxide (III). III, recrystd. from PhMe was refluxed in 750 cc. EtOH 5 min., 150 cc. 10% aq. NaOH soln. added, the whole refluxed again 15 min., and cooled to give I, m. 257–8°. The yield (on Ia) was 84%. Treating III with Zn powder gave II. I and III were sol. in MeAc, AcH, moderately sol. in EtOH. I was slightly sol. in PhMe. T. Szél

RUMANIA / Organic Chemistry--Synthetic Organic Chemistry G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27510

Author : Bodea, C. and Raileanu, M.
Inst : Rumanian Academy of Sciences
Title : The Nitration of Phenothiazine

Orig Pub: Studii si Cercetari Chim Acad RPR, Fil Cluj, 8, No 3-4, 301-313 (1957) (in Rumanian with French and Russian summaries)

Abstract: For the purpose of studying the biological properties of nitroderivatives of phenothiazine (I), the authors have investigated the nitration of I and of the 5,5-dioxide of I (II). 3,7-dinitrophenothiazine (III) was prepared and oxidized to the 5,5-dioxide (IV) with H_2O_2; IV was also prepared by the nitration of II and

Card 1/5

RUMANIA / Organic Chemistry--Synthetic Organic Chemistry G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27510

Abstract: 90%, mp 172-173° (from alc). A boiling solution of 10 gms IX in 85 ml CH_3COOH is treated with 10 ml 30% H_2O_2, heated for 1.5 hrs (adding 10 ml portions of H_2O_2 every 30 min for a total of 30 ml), and the solution is allowed to stand 14-16 hrs; the 5,5-dioxide of IX is obtained, yield 92%, mp 246-247° (from benzene); hydrolysis of the product obtained with 10% alcoholic KOH gives II, yield 78%, mp 255-256° (from CH_3COOH). A suspension of 5 gms III in 0.1 liter CH_3COOH is treated dropwise with a solution of HNO_3 (d 1.42) in CH_3COOH (1:1) until the solution of III is complete and the solution is diluted with water; V is obtained, yield 65%, mp 309-310° (from aniline). 5 gms V are oxidized

Card 3/5

RUMANIA / Organic Chemistry--Synthetic Organic Chemistry G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27510

Abstract: with H_2O_2 (see IX) and IV is obtained, yield 85%, mp 337-338° (from $C_6H_5NO_2$ or aniline). 2 gms of powdered II are added gradually to a solution of 50 ml HNO_3 (d 1.5) in 150 ml water, the solution is stirred for 15-20 min, and allowed to stand for 8 hrs with periodic stirring; VI is obtained, yield 70%, mp 344-345°(from $C_6H_5NO_2$). 5 gms I are gradually added to a mixture of 30 ml HNO_3 (d 1.5) and 15 ml 20% oleum [fuming H_2SO_4], the mixture is heated for 20 min at 100°, and ice water is added to precipitate VII, yield 85%, mp 354-355° (from $C_6H_5NO_2$). A similar procedure is followed in preparing VIII from II, yield 90%, mp 346-347° (from $C_6H_5NO_2$). VIII is obtained in equal yield by the oxidation of VII with H_2O_2 or

Card 4/5

RAILEANU, M.

Distr: 4E3d

Nitration of phenothiazine. C. Bodea and M. Raileanu. (*Acad. rep. populare Romîne, Filiala Cluj*). *Studii cercetări chim.* 8, 303–13(1957).—Through a systematic study of the nitration of phenothiazine (I) and phenothiazine 5,5-dioxide (II) it was shown that of all nitrated derivs. of I described only 3-nitrophenothiazine 5-oxide (III) corresponded to a pure product. H_2O_2 oxidn. of III produced 3-nitrophenothiazine 5,5-dioxide (IV). IV was also prepd. from II (2 g.) added slowly to a soln. of HNO_3 (50 ml. d. 1.50) and H_2O (150 ml.). After 8 hrs. with intermittent stirring, filtration, and washing with H_2O and alc., 70% IV was obtained, yellow prisms, m. 344–5° ($PhNO_3$). 3,7-Dinitrophenothiazine (V) was prepd. from 5 g. I by dissolving in $CHCl_3$ and 10 ml. AcOH and adding to 5 g. $NaNO_2$ and at 1-hr. intervals adding two 5-ml. portions of AcOH. The brown ppt. was filtered off, washed with glacial AcOH, alc., H_2O and finally with alc. to give 55–60% V, brown needles, m. 286–7° (aniline). Oxidn. of V with 1:1 HNO_3 (d. 1.42) and glacial AcOH produced 65% of 3,7-dinitrophenothiazine 5-oxide (VI), yellow needles, m. 309–10° (aniline). H_2O_2 oxidn. of VI yielded 85% 3,7-dinitrophenothiazine 5,5-dioxide (VII), m. 377–8° ($PhNO_2$ or $PhNH_2$). VII was also prepd. in 35% yield from direct nitration of II. 1,3,7,9-Tetranitrophenothiazine 5-oxide (VIII) was prepd. from 5 g. I, introduced in small amts. to a mixt. of HNO_3 (d. 1.50, 30 ml.) and 20% oleum (15 ml.) and then heated on a water-bath 20 min. The mixt. was then poured on ice and the ppt. filtered off, washed with H_2O and then alc. to give 85% VIII, yellow-orange needles, m. 354–5° ($PhNO_2$). Oxidn. of VIII with 30% H_2O_2 produced 90% 1,3,7,9-tetranitrophenothiazine 5,5-dioxide (IX), m. 346–7° ($PhNO_2$). Nitration with HNO_3-oleum (as for VIII) produced 90% IX from II and 75% IX from VII.

Michael Cais

3
1-BW(BN)
1-JAT(WB)
1

RUMANIA / Organic Chemistry--Synthetic Organic Chemistry G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27510

Author : Bodea, C. and Raileanu, M.
Inst : Rumanian Academy of Sciences
Title : The Nitration of Phenothiazine

Orig Pub: Studii si Cercetari Chim Acad RPR, Fil Cluj, 8, No 3-4, 301-313 (1957) (in Rumanian with French and Russian summaries)

Abstract: For the purpose of studying the biological properties of nitroderivatives of phenothiazine (I), the authors have investigated the nitration of I and of the 5,5-dioxide of I (II). 3,7-dinitrophenothiazine (III) was prepared and oxidized to the 5,5-dioxide (IV) with H_2O_2; IV was also prepared by the nitration of II and

Card 1/5

114

RUMANIA / Organic Chemistry--Synthetic Organic Chemistry G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27510

Abstract: 90%, mp 172-173° (from alc). A boiling solution of 10 gms IX in 85 ml CH_3COOH is treated with 10 ml 30% H_2O_2, heated for 1.5 hrs (adding 10 ml portions of H_2O_2 every 30 min for a total of 30 ml), and the solution is allowed to stand 14-16 hrs; the 5,5-dioxide of IX is obtained, yield 92%, mp 246-247° (from benzene); hydrolysis of the product obtained with 10% alcoholic KOH gives II, yield 78%, mp 255-256° (from CH_3COOH). A suspension of 5 gms III in 0.1 liter CH_3COOH is treated dropwise with a solution of HNO_3 (d 1.42) in CH_3COOH (1:1) until the solution of III is complete and the solution is diluted with water; V is obtained, yield 65%, mp 309-310° (from aniline). 5 gms V are oxidized

Card 3/5

RUMANIA / Organic Chemistry--Synthetic Organic Chemistry G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27510

Abstract: or by the nitration of IV. -- A. Marin

Card 5/5

Country : RUMANIA
Category: Organic Chemistry. Organic Syntheses G

Abs Jour: RZhKhim., No. 17, 1959, No. 60901

Author : Bodea, C.; Rosleanu, M.
Inst : -
Title : Chloro-Nitro-Derivatives of Phenthiazine Synthesized by the Direct Chlorination and Nitration.

Orig Pub: Studii si cercetari chim. Acad. RPR Fil. Cluj, 1958, 9, No 1-4, 159-166

Abstract: The direct chlorination of phenthiazine (I) in $CHCl_3$ yields 3, 7-dichloro-I (II) and 1, 3, 7 9-tetrachloro-I (III); the products of mono-or tri-chlorination, thereby, are not formed.

Card : 1/7

Country : RUMANIA
Category: Organic Chemistry. Organic Syntheses

G

Abs Jour: RZhKhim., No 17, 1959, No. 60901

nitro-7-chlorophenthiazines (VI, VII), and from II are obtained 5-oxides of 1-nitro- and 1, 9-dinitro-3, 7- dichlorophenthiazines (VIII, IX). VI and VII are oxidized with H_2O_2 into the respective 5, 5-dioxides (VIa, VIIa). In the nitration of 5, 5-dioxide of 3, 7-dichloro-I (X) 5, 5-dioxides of VIII and IX are obtained (VIII a, IX a). In the nitration of IV, 9-nitro--IV (XI) is synthesized. V is oxidized into 5-oxide and 5, 5-dioxide of V (XII, XIII). To a weighed 21 gr I in 0.5 liter CH_3COOH are added, drop by drop and at a temperature $< 20^\circ$, 250 ml CH_3COOH, saturated Cl_2, the mixture is then

Card : 3/7

Country : RUMANIA
Category: RZhKhim., No 17, 1959, No. 60901

G

Abs Jour: Organic Chemistry. Organic Syntheses

poured into water, the residue is washed with acetone, thus obtaining III. The solution is then diluted with water and II is separated, with 33% yield and of 225-227° melting point (from benzene). Through the suspension, of 5 gr sulfone I in 280 ml CH_3COOH, Cl_2 is passed thus synthesizing IV, yield 54%, melting point 2 -256° (from benzene). 1 gr V is gradually introduced at 15-20° into 10 ml HNO_3 (d = 1.42), pouring the solution into water and separating VI of 253-254° melting point (from CH_3COOH); Analogically from 2 gr II and 50 ml HNO_3 (d = 1.42) IX is synthesized, yield 72%, melting point 299-300° (from aniline). By the same method, while employ-

Card : 4/7

Country : RUMANIA
Category: Organic Chemistry. Organic Synthesis.

Abs Jour: RZhKhim., No. 17, 1959, No. 60901

alc.). In the nitration of X with HNO_3 (d = 1.42) VIIIa is obtained with yield of 80%, and melting point of 302-303° (from CH_3COOH). By employing HNO_3 (d = 1.5), IXa is obtained from X, yielding 82%, melting point 247-248° (from CH_3COOH), and XI is derived from IV, yield 58%, melting point 277-278° (from $C_6H_5NO_2$). Into a warm solution of 0.6 gr V in 50 gr CH_3COOH, 1 ml H_2O_2 is added, followed by 3-5 minutes heating, filtering, pouring into water, and producing XII, yield 58%, melting point 275-276° (from CH_3COOH). To 400 ml CH_3COOH is added a solution containing 5 gr V in 60 ml of conc. H_2SO_4, followed by heating, addition of 10 ml of 30% H_2O_2, boiling, while

Card : 6/7

6 2-may

7 7 7

Syntheses of heteroauxin, tryptamine, and serotonin. Costin D. Nenitzescu and Dan Ráileanu (Akad. Romanian Peoples Republic, Bucharest, Romania). *Chem. Ber.* 91, 1141–5(1958).—Powd. NaOAc (80 g.) added with stirring to 500 cc. Ac_2O, the mixt. treated rapidly with 100 g. *o*-$HO_2CC_6H_4NAcCH_2CO_2H$, m. 211°, refluxed 5 min. (CO_2 evolution), distd. to remove the excess Ac_2O, the residue heated with stirring with 750 cc. H_2O to boiling, cooled, filtered, the crude 1,3-diacetylindoxyl (about 85 g.) added to 120 g. $Na_2SO_3.7H_2O$ in 1.6 l. H_2O at 70°, the mixt. stirred 1.5 hrs. at 70° and cooled, and the product filtered off yielded 44 g. *1-acetylindoxyl* (I), m. 188°; *oxime*, m. 177° (decompn.) (50% EtOH); *2,4-dinitrophenylhydrazone*, m. 202° (decompn.) (pyridine). NH_4OAc (4 g.) in 75 g. PhOH warmed, treated with 15 g. $NCCH_2CO_2H$, 50 cc. xylene, and 15 g. I, refluxed 5 hrs. with the azeotropic removal of the H_2O, the mixt. steam distd. to remove the xylene, and the steam distn. residue allowed to stand overnight and recrystd. from aq. EtOH gave 10.5 g. *1-acetyl-3-indolylacetonitrile* (II), m. 112° (CCl_4). Crude II (20 g.) and 300 cc. 30% aq. NaOH refluxed 6–7 hrs. and acidified gave 13.5 g. *3-indolylacetic acid* (heteroauxin) (III), m. 164–5° (decompn.). II (1.2 g.) extd. into 1.0 g. $LiAlH_4$ in 80 cc. abs. Et_2O and the soln. of the product in Et_2O treated with 1 g. cryst. $(CO_2H)_2$ in 5 cc. EtOH yielded 1.1 g. *3-indolylethylamine* (*tryptamine*)-$(CO_2H)_2$, m. 147°. 2,5-$Cl(H_2N)C_6H_3CO_2H$ (20 g.) dissolved in 800 cc. 12.5% H_2SO_4 with warming, cooled, diazotized with 8 g. $NaNO_2$, added to 1 l. H_2O of 80°, and the product isolated with Et_2O yielded 16 g. *2,5-Cl(HO)C₆H₃CO₂H* (IV), m. 172°. IV (34 g.) and 8 g. NaOH in 100 cc. H_2O and 300 cc. EtOH refluxed 2 hrs. with 70 cc. $PhCH_2Cl$, treated dropwise with stirring at reflux during 2 hrs. with 200 cc. 17% aq. NaOH, refluxed 1 hr., freed of the EtOH, dild. with 600 cc. H_2O, washed with C_6H_6, treated with C, acidified with concd. HCl, and the cryst. ppt. recrystd. at −10° from 200 cc. EtOH and 100 cc. H_2O gave 38 g. *2,5-Cl(PhCH₂O)C₆H₃CO₂H* (V), m. 122° (EtOH). V (5 g.) and 2.5 g. $H_2NCH_2CO_2H$ dissolved with warming in a soln. of 2.5 g. KOH and 2.5 g. K_2CO_3 in 40 cc. H_2O, the soln. refluxed 4 hrs. with a little Cu powder, filtered, dild. with 400 cc. H_2O, and acidified with concd. HCl yielded 5.7 g. *2,4-HO₂C(PhCH₂O)-C₆H₃NHCH₂CO₂H* (VI), m. 221 (decompn.) (EtOH with H_2O). VI (15 g.) and 27 g. $Na_2CO_3.10H_2O$ in 300 cc. H_2O treated dropwise with shaking with 5.7 g. Ac_2O, shaken 1 hr., and acidified with concd. HCl to Congo red yielded 15.5 g. *N-Ac deriv.* (VII) of VI, m. 110° with previous sintering. VII (5 g.) treated in the usual manner with 25 cc. Ac_2O and 7 g. NaOAc yielded 4 g. *1,3-diacetyl-5-(benzyloxy)indoxyl* (VIII), m. 110° (EtOH). VIII (6 g.) added to 9.0 g. $Na_2SO_3.7H_2O$ in 180 cc. H_2O and 180 cc. EtOH at reflux temp., refluxed 1 hr., and allowed to stand overnight yielded 3.5 g. *1-acetyl-5-(benzyloxy)indoxyl* (IX), m. 170° (EtOH). $NCCH_2CO_2H$ (4.5 g.), 13.5 cc. xylene, and 1.5 g. IX added to 22.5 g. PhOH and 1.2 g. NH_4OAc and processed in the usual manner gave 1.25 g. *5-PhCH₂O deriv.* (X) of II, m. 138° (iso-PrOH). X (0.82 g.) treated with 0.5 g. $LiAlH_4$ in Et_2O and the Et_2O soln. of the crude product treated with 1 g. $(CO_2H)_2$ in 5 cc. EtOH yielded 0.76 g. *neutral oxalate* of the *5-PhCH₂O deriv.* (XI) of III, m. 162° (decompn.) (EtOH); *acid oxalate*, m. 197° (decompn.) (dioxane); *HCl salt*, 79% yield, m. 265° (EtOH-Et_2O). Neutral oxalate (0.2 g.) of XI in 15 cc. abs. EtOH treated

1/2 CG

6
2-may

Costin D. Nenitzescu and Dan Răileanu

with 0.1 g. $(CO_2H)_2$ in EtOH, hydrogenated over 0.1 g. 10% Pd-C, and filtered, and the filtrate dild. with dry Et_2O pptd. 0.13 g. *acid oxalate* of *serotonin*, m. 198° (decompn.) (abs. EtOH-Et_2O). X (1 g.) in 50 cc. Me_2CO treated with 40 cc. 2% aq. NaOH and 10 cc. 30% H_2O_2, kept 24 hrs. at room temp., refluxed 5 min., evapd. *in vacuo*, and the residue cooled deposited 0.56 g. *5-benzyloxy-3-indolylacetamide*, m. 148°.

F. W. Hoffmann

CC
2/2

RAILEANU, T., dr.; IONES[illegible] dr.; FARCAS, Gh., dr.; ROZOR, Florica, dr.

Gastric polyps. [illegible] Ag '63.

1. Lucrare efectuata in Spitalul MTTC din Oradea.
(STOMACH NEOPLASMS) (POLYPI)

RAILEANU, Valentin, ing.

Influence of limestone granulation on the physicochemical properties of self-founding agglomerates. Metalurgia constr mas 14 no.4:289-293 Ap '62.

1. Combinatul siderurgic Hunedoara.

IFTIME, P., ing.; ROSCA, P., ing.; RAILEANU, V., ing.

Devices for protection from dangerous axial move in steam turbines. Energetica Rum 11 no.12:593-600 D'63.

FOLTICSKA, Maria, ing.; RAILEANU, Vasile, ing.;

Increasing the productivity of the agglomerating machines and widening of the fuel basis. Metalurgia Rum 15 no.5: 352-354 My '63.

TOLUBINSKIY, V.I. [Tolubyns'kyi, V.I.]; VOROB'YEV, P.I. [Vorobiov, P.I.]; RAILKO, G.A. [Railko, H.O.]; KOZLYUK, V.N. [Kozliuk, V.M.]

Pilot plant in Aleksandriya for studying the utilization of lignite for power fuel production. Zbir.prats' Inst.tepl.AN URSR no.23:49-56 '61. (MIRA 15:2)
(Aleksandriya--Coke)
(Lignite)

RAILKO, G.A.; BAZEYEV, Ye.T.

Industrial cyclone furnace. Energ. i elektrotekh. prom. no.1: 18-20 Ja-Mr '63. (MIRA 16:5)

(Furnaces)

RAILLO, A.

Griby Roda Fizarium (Fusarium Mushrooms)

410 p. 3.00

SO: Four Continent Book List, April 1954

RAILLO, A. I.

Fungi of the Genus Fusarium, State Publishers of Agricultural Literature, Moscow, 1950 415 pages. 464 07 R13.

SO: SIRA SI 90-53, 15 Dec 1953

RAILLO, A. I.

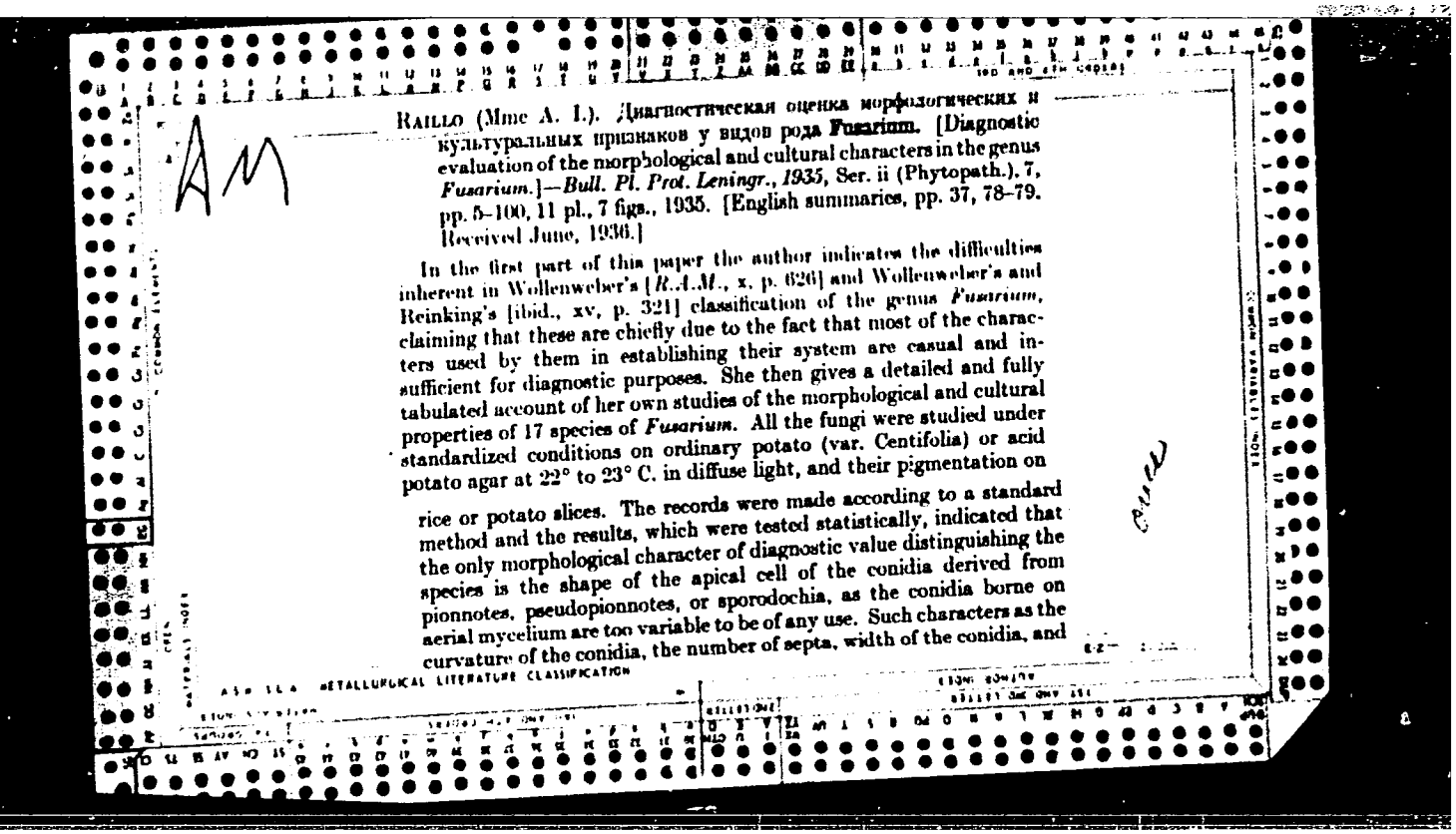
"Taxonomy of the Genus Fusarium and a Method for the Determination of the Species Belonging to It", Trudy Botanicheskogo Instituta Akademii Nauk SSSR, Seriia 2: Sporovye Rasteniia, no 3, 1936, pp 803-857 541 Sa 21P.

SO: SIRA SI-90-53, 15 Dec 1953

RAILLO, A. I.

"Diagnostical Estimation of Morphological and Cultural Characters of Species in the Genus Fusarium" Trudy po Zashchite Rastenii, Seriia 2, #7, 1935, pp 5-99, 423 92.

SO: SIRA SI 90-53, 15 Dec 1953

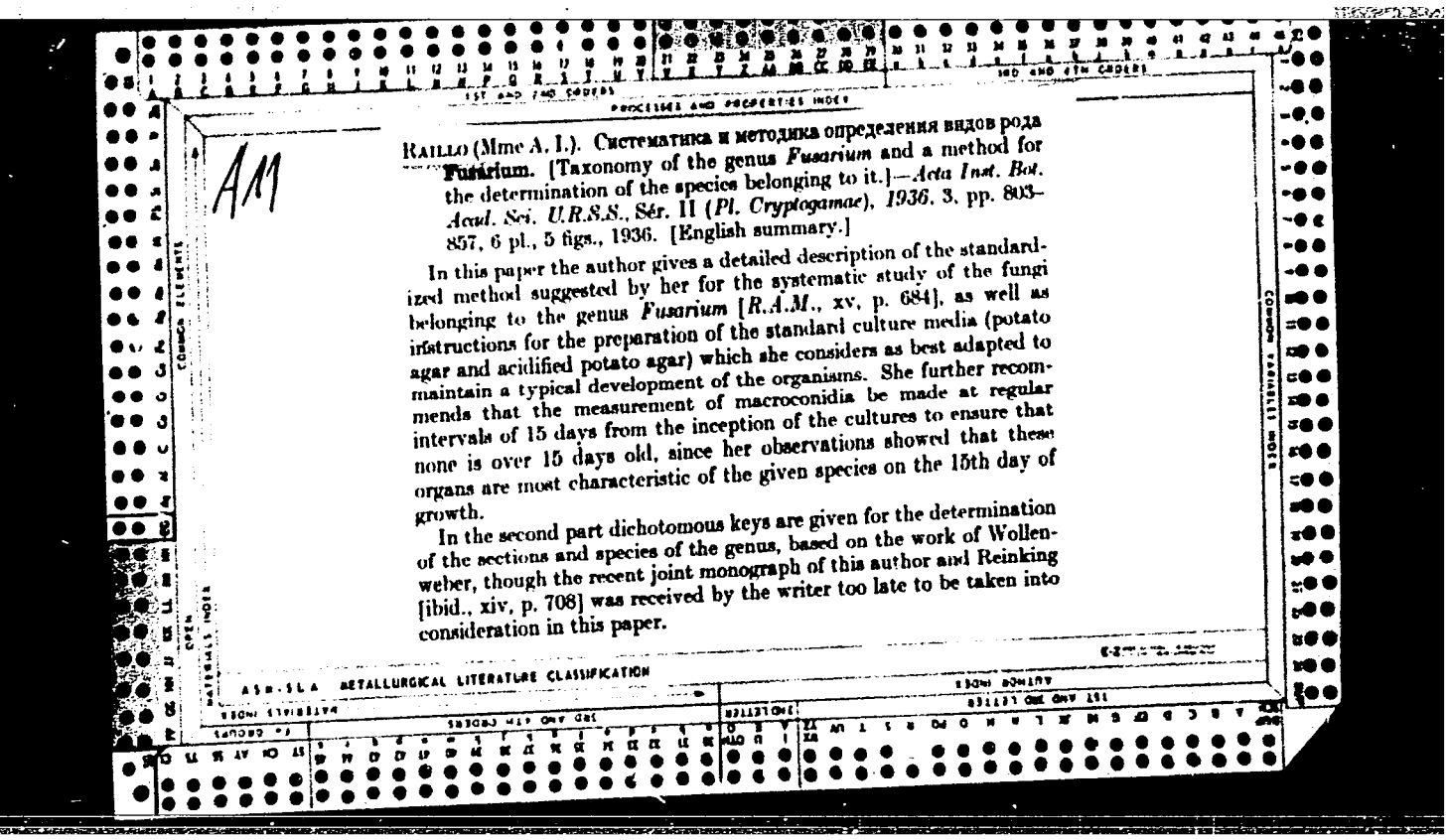


RAILLO (Mme A. I.). [Диагностическая оценка морфологических и культуральных признаков у видов рода **Fusarium**. [Diagnostic evaluation of the morphological and cultural characters in the genus *Fusarium*.]—*Bull. Pl. Prot. Leningr.*, *1935*, Ser. ii (Phytopath.), 7, pp. 5–100, 11 pl., 7 figs., 1935. [English summaries, pp. 37, 78–79. Received June, 1936.]

In the first part of this paper the author indicates the difficulties inherent in Wollenweber's [*R.A.M.*, x, p. 626] and Wollenweber's and Reinking's [ibid., xv, p. 321] classification of the genus *Fusarium*, claiming that these are chiefly due to the fact that most of the characters used by them in establishing their system are casual and insufficient for diagnostic purposes. She then gives a detailed and fully tabulated account of her own studies of the morphological and cultural properties of 17 species of *Fusarium*. All the fungi were studied under standardized conditions on ordinary potato (var. Centifolia) or acid potato agar at 22° to 23° C. in diffuse light, and their pigmentation on rice or potato slices. The records were made according to a standard method and the results, which were tested statistically, indicated that the only morphological character of diagnostic value distinguishing the species is the shape of the apical cell of the conidia derived from pionnotes, pseudopionnotes, or sporodochia, as the conidia borne on aerial mycelium are too variable to be of any use. Such characters as the curvature of the conidia, the number of septa, width of the conidia, and

the length of the apical cell can only serve to distinguish subspecies, varieties, or subvarieties, while cultural characters such as pigment, presence of sclerotia, and mode of spore formation are only indicative of forms. The data thus obtained are used in an attempt to outline a theoretical structure of the species in the genus *Fusarium* comparable with that already introduced into the classification of the phanerogams by Vavilov and other Russian authors, and which in the author's opinion should considerably simplify the present classification of the genus.

In the second part, the author describes her studies on the variability of the morphological and cultural behaviour of different single-spore isolates from single-spore cultures of the different species, the results of which showed that the shape of the apical conidial cell, the prevailing number of septa, and the shape of the curvature of the conidia remain constant in all the isolates derived from single-spore cultures. The length and width of the conidia, on the other hand, as well as the cultural characters, varied considerably in the isolates. On the whole, these results are considered to confirm the relative taxonomic value of the different characters as indicated in the first part of the paper.



A11

RAILLO (Mme A. I.). Систематика и методика определения видов рода **Fusarium**. [Taxonomy of the genus *Fusarium* and a method for the determination of the species belonging to it.]—*Acta Inst. Bot. Acad. Sci. U.R.S.S.*, Sér. II (*Pl. Cryptogamae*), *1936*. 3. pp. 803–857, 6 pl., 5 figs., 1936. [English summary.]

In this paper the author gives a detailed description of the standardized method suggested by her for the systematic study of the fungi belonging to the genus *Fusarium* [*R.A.M.*, xv, p. 684], as well as instructions for the preparation of the standard culture media (potato agar and acidified potato agar) which she considers as best adapted to maintain a typical development of the organisms. She further recommends that the measurement of macroconidia be made at regular intervals of 15 days from the inception of the cultures to ensure that none is over 15 days old, since her observations showed that these organs are most characteristic of the given species on the 15th day of growth.

In the second part dichotomous keys are given for the determination of the sections and species of the genus, based on the work of Wollenweber, though the recent joint monograph of this author and Reinking [ibid., xiv, p. 708] was received by the writer too late to be taken into consideration in this paper.

EWP(k)/EWT(m)/EWP(w)/ETI IJP(c) EM/WW/RM

ACC NR: AP6021699 SOURCE CODE: CZ/0032/66/016/001/0035/0040

AUTHOR: Raiman, J.--Rayman, Yu. (Engineer)

ORG: 'Victorious February' Works, Hradec Kralove (Zavody vitezneho unora)

TITLE: Ferritic structural steels for high-pressure vessels operating at low temperatures

SOURCE: Strojirenstvi, v. 16, no. 1, 1966, 35-40

TOPIC TAGS: structural steel, ferritic steel, welding technology

ABSTRACT: Experience is reported on the manufacture of large high-pressure vessels for chemical plants where they are exposed to low temperature. Czechoslovakia has 3 brands of ferritic steel suitable for this purpose (11 368 for temperatures to -50°C; 11 413, to -40°C; and 16 222, to -70°C) and each brand requires special technology and treatment. Particular attention is devoted to welding problems, composition of electrodes, heat treatment of welds, and the reliability of testing methods. Orig. art. has: 15 figures and 4 tables. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 11, 13 / SUBM DATE: none / ORIF REF: 005 / OTH REF: 002

Card 1/1 UDC: 620.165:669.15-194.57:669.14.018.41

RAIMBEKOV, YE.S.

(29)

The Second All-Union Conference on Rhenium, sponsored by the Institute of Metallurgy imeni A. A. Baykov, Academy of Sciences USSR, and the State Institute of Rare Metals, was held in Moscow 19-21 November 1962. A total of 335 representatives from 83 scientific institutions and industrial establishments participated. Among the reports presented were the following: autoclave extraction of Re from Cu concentrates (A. P. Zelikman and A. A. Peredereyev); Re extraction from the gaseous phase (V. P. Savrayev and N. L. Peysakhov); recovery of Re by sorption and ion interchange (V. I. Bibikova, V. V. Il'ichenko, K. B. Lebedev, G. Sh. Tyurokhodzhayeva, V. V. Yermilov, Ye. S. Raimbekov, and M. I. Filimonov); production of carbonyl Re (A. A. Ginzburg); electrolytic production of high-purity Re and electroplating with Re (Z. M. Sominskaya and A. A. Nikitina); Re coatings on refractory metals produced by thermal dissociation of Re chlorides (A. N. Zelikman and N. V. Baryshnikov); plastic deformation and thermomechanical treatment of Re (V. I. Karavaytsev and Yu. A. Sokolov); growth of Re single crystals and effect of O_2 on their properties (Ye. M. Savitskiy and G. Ye. Chuprikov); Re-Mo, Re-W, and Re-precious-metal alloys (Ye. M. Savitskiy, M. A. Tylkina, and K. B. Povarova); synthesis of Re nitrides, silicides, phosphides, and selenides (G. V. Samsonov, V. A. Obolonchik, and V. S. Neshpor); weldability of Re-Mo and Re-W alloys (V. V. D'yachenko, B. P. Morozov, and G. N. Kiobanov); new fields of application for Re and Re alloys (M. A. Tylkina and Ye. M. Savitskiy); and Re-Mo alloy for thermocouples (S. K. Danishevskiy, Yu. A. Kocherzhinskiy, and G. B. Lapp). [WW]

Tsvetnyye metally, no. 4, Apr 1963, pp 92-93

L 23876-65 EWT(m)/EPR/EWP(t)/EWP(b) Ps-4 IJP(c) JD/MLK

ACCESSION NR: AT5002755 S/0000/64/000/000/0040/0043

AUTHOR: Lebedev, K. B.; Ageyev, S. A.; Okhotnikova, N. A.; Yermilov, V. V.; Raimbekov, Ye. S.; Filimonov, M. I.

TITLE: Recovery of rhenium from copper concentrates by alkaline leaching

SOURCE: Vsesoyuznoye soveshchaniye po probleme reniya. 2d, Moscow, 1962. Reniy (Rhenium); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 40-43

TOPIC TAGS: rhenium, rhenium extraction, copper concentrate, alkaline leaching, rhenium cementation, potassium perrhenate

ABSTRACT: The authors propose a method for recovering rhenium in which the concentrate (about 30% copper, 3% lead, 2% zinc, and 0.003% rhenium) is leached with sodium hydroxide, rhenium and lead go into solution, and their cementation is then carried out on zinc. A complete flow diagram of the process is given, and the procedure is described in detail. The method is applicable to both copper and copper-lead rhenium-containing concentrates. The final recovery of the metals is tentatively estimated as follows: rhenium in potassium perrhenat, 50-55%; lead in crude lead, 20-25%; zinc in sheet zinc, up to 2%. Orig. art. has: 1 figure

Card 1/2

L 23876-65

ACCESSION NR: AT5002755

and 1 formula.

ASSOCIATION: None

SUBMITTED: 05Aug64 ENCL: 00 SUB CODE: MM

NO REF SOV: 011 OTHER: 000

Card 2/2

ARIFKHODZHAYEV, S.A.; RAIMBEKOV, Z.

Using electronic digital computers in construction management. Izv. AN Uz. SSR. Ser. tekh. nauk 9 no.6:14-18 '65 (MIRA 19:1)

1. Institut mekhaniki i Vychislitel'nyy tsentr AN UzSSR. Submitted June 25, 1965.

RAIMOV, Kh.S.

Biological characteristics of the grain leaf beetle. Zashch. rast. ot vred. i bol. 3 no.5:57 S-O '58. (MIRA 11:10)
(Beetles) (Grain--Diseases and pests)

VERETENNIKOV, Leonid Porfir'yevich, kand. tekhn. nauk, dotsent; RAIMOV, Mikhail Mikhaylovich, kand. tekhn. nauk, starshiy nauchnyy sotrudnik

Use of an analog computer in studying the stability of a synchronous generator in the small. Izv. vys. ucheb. zav.; elektromekh. 5 no.7:796-809 '62. (MIRA 15:10)

(Electric generators)
(Electronic analog computers)

VERETENNIKOV, Leonid Fofir'yevich; [illegible], Aleksandr Ivanovich, RAINOV, Mikhail Mikhaylovich; VEN[illegible], V.[illegible], doktor tekhn. nauk, prof., laureat Leninskoy premii, retsenzent; SHIROKHOV, Ye.I., nauchn. red.; [illegible], S.V., red.

[Modeling, computer techniques, and transient processes in electric ship propulsion systems] Modelirovanie, vychislitel'naia tekhnika i perekhodnye protsessy v sudovykh elektroenergeticheskikh sistemakh. Leningrad, Sudostroenie, 1964. 383 p. (MIRA 18:1)

SOV/144-59-2-2/19

AUTHORS: Ryabinin, I.A., Candidate of Technical Sciences, Lecturer and Raimov, M.M., Senior Scientific Worker

TITLE: The Use of Electronic Simulators for Investigating the Stability of Parallel Operation of Alternators of Comparable Power

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1959, Nr 2, pp 11 - 26 (USSR)

ABSTRACR: The transient behaviour of coupled alternators is strictly described by non-linear differential equations which are not solvable in their most general form. Even if the simpler problem of so-called static stability is resorted to, the high order of the system is a great disadvantage. It is, however, necessary to make a complete assessment of static stability in connection with present developments on the voltage- and frequency-control of alternators taking hunting into account. Refs 4, 9 and 10 describe how electronic computers, both analogue and digital, have been used to solve similar problems. The particular example studied is shown in

Card 1/3

The Use of Electronic Simulators for Investigating the Stability of Parallel Operation of Alternators of Comparable Power

Figure 1 as two coupled alternators feeding a load. The equations used were first proposed by A.A. Gorev (Ref 2). They are the set of ten denoted by (A). The power balance equations (active and reactive) are (6) and the voltage-regulator equations for a phase-compounded machine are (B). The complete system is tenth order and has 22 non-linearities. If the influence of transient oscillations of current on the rotor motion is neglected the order may be reduced to 6 and the non-linearities to 14. The number of function generators necessary for a conventional solution was not available and the investigation was thus limited to "small" scale. The equation system must first be linearized as Eq (1). This process takes into account: 1 - losses in the stator circuit; 2 - the saliency of the alternator poles; 3 - transient electromagnetic processes in the field and stator windings; 4 - the torque-speed mechanical characteristic of the prime movers; 5 - the static characteristics of the load for voltage and frequency; 6 - the automatic voltage

regulator. On the other hand, the influence of: a) the dynamic characteristics of the load; b) the dynamic characteristics of the prime mover speed regulator - are ignored. If it is supposed that each alternator is rated at 30 kVA and is loaded 50%, the insertion of numerical values gives Eq (2). The computer chosen is the MPT-9 containing 48 operational amplifiers with automatic zero setting. Each amplifier can sum up to 12 quantities. 48 constants and 48 variable coefficients can be set in. The variable is a direct voltage in the computing range ± 100 V. The maximum computing error does not exceed ± 0.5%. Drift is less than 100 μV over 10 minutes. The form of the equations as fed to the machine is Eq (5). The scale is chosen from a consideration of the peak values likely to be obtained. Each "machine" second represents 10 synchronous "alternator" seconds. Two coordinates, $\Delta S_{\ddot{u}}$ and ΔU, have been excluded as less important. As written, Eq (5) would require 70 voltage

The Use of Electronic Simulators for Investigating the Stability of Parallel Operation of Alternators of Comparable Power

dividers but the block diagram adopted (Figure 2) reduces this requirement to 64. Besides these, 11 summing, 10 integrating and 10 inverting amplifiers are used. The specific topics examined are: stability in the absence of voltage control; stability with voltage control; the effect of the slope of the torque-speed characteristic of the prime mover on the transient response; the effect of stator resistance on system behaviour. In each experiment, the constants have the same values and the disturbance is a unit function. Figure 3 was taken without voltage control. Figure 4 shows the effect of the excitation parameter K on parallel working. With $K > 1$ the system is unstable. Figure 5 shows the effect of damping torque when $K = 1.2$. The features specially stressed in this study are: relative simplicity of the method; comparatively little difficulty encountered; the direct, graphic appeal of the results; possibility of introducing non-linear effects. The disadvantage of relative inaccuracy is

The Use of Electronic Simulators for Investigating the Stability of Parallel Operation of Alternators of Comparable Power

not important in this application.
There are 8 figures and 10 references, 9 of which are Soviet and 1 English.

ASSOCIATION: Voyenno-Morskoy akademii korablestroyeniya i vooruzheniya imeni A.N. Krylova (The A.N. Krylov Naval Academy of Ship Building and Armaments)

SUBMITTED: December 15, 1958

RAIMOV, T.

Tashkent as an industrial and transportation center. Nauch. trudy TashGU no. 213 Geography no. 24:97-110 '63. (MIRA 17:5)

RAINOV, T.

Economic and geographical study of the construction industry of a large city. Nauch. trudy TashGU no.251. Trudy Nauch.-issl. otd. Geog. fak. no.3:10-17 '64. (MIRA 18:3)

GOLUBEVA, Z., strakhovoy delegat; RAIMOVA, N., strakhovoy delegat

Help for sick co-workers. Okhr. truda i sots. strakh. 5 no.9: 19 S '62. (MIRA 16:5)

1. Chulochno-trikotazhnaya fabrika, Smolensk.
(SMOLENSK--KNIT GOODS INDUSTRY--HYGIENIC ASPECTS)

RAIMOVA, N.I., assistent

Scalp forceps in individual forms of obstetrical pathology. Kaz. med.zhur. 40 no.6:76-78 N-D '59. (MIRA 13:5)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.B. Gillerson) Omskogo meditsinskogo instituta im. M.I. Kalinina.
(FORCEPS, OBSTETRIC)

RAIMOVA, N. I.

Cand Med Sci - (diss) "Nearest (in time) and remote results of operation on the position of obstetrical forceps." Kazan', 1961. 18 pp; (Ministry of Public Health RSFSR, Kazan State Med Inst); 200 copies; free; (KL, 7-61 sup, 261)

[redacted], [redacted]; [redacted]

Effect of experimental hypercholesterolemia and a partial denervation in frogs on the phenomenon of Sechenov's inhibition. Nauch. trudy Kaz. gos. med. inst. 14:221-222 '64. (MIRA 18:9)

[redacted], kafedra normal'noy fiziologii (zav. - prof. I.N.Volkova) [redacted] meditsinskogo instituta.

SHUMANOVA, A.A.; SOKOLOV, B.S.; CHERKASHENINA, Ye.F.; GARSKOVA, A.A., CHULKOV, M.P.; BORISENOK, V.G.; RAIMOVA, S.S.; KULIK, O.A.; UDALOVA, L.I.; KAZACHKOV, S.S., otv. red.; ZHDANOVA, L.P., red.

[Agroclimatic manual on Omsk Province] Agroklimaticheskii spravochnik po Omskoi oblasti. Leningrad, Gidrometeoizdat, 1959. 227 p. (MIRA 17:7)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologicheskoy sluzhby. Omskoye upravleniye. 2. Gidrometeorologicheskaya observatoriya Omskogo upravleniya gidrometeorologicheskoy sluzhby (for all except Kazachkov, Zhdanova).

RAIKOV, I.B.

The nuclear apparatus of Remanella multinucleata Kahl (Ciliata, Holotricha). Acta biol Hung 14 no.3:221-229 '63.

1. Laboratory of Protozoan Cytology, Institute of Cytology of the Academy of Sciences of the U.S.S.R., Leningrad (Head: G. Poljansky)[Polzhanskiy, G.].

*

GERASIMOV, M.; RUSCHEV, D.; RAIKOV, Kr.; BRANIAKOV, L.

Preparation of bitumen emulsions for road construction.
Godishnik khim tekh 8 no.1:183-203 '61 [publ. '62].

MIKHAILOV, K., inzh.; VELCHEV, St., inzh.; STANEV, St., arkh.; TSVETKOV, V., inzh.; VELKOV, As., ikon.; GUDEVA, Zh., inzh.; SOTIROV, Iv., inzh.; TSONEV, D., inzh.; KHRISTOVA, S., inzh.; RAIKOV, Il., inzh.; KOSTADINOV, V., inzh.

Current problems of urban electrical engineering. Elektroenergiia 16 no.1:3-7 Ja '65.

RAIKOV, Kh.; RACHEVA, R.; IVANOVA, S.

Our care for calves. p.22. For a larger number of healthy calves. Tr. from the Russian p.23.
(Kooperativno Zemedelie Vol. 10, no. 8, Aug, 1955, Sofiya)

SO:Monthly List of East European Accessions, (EEAL). LC, Vol. 4, No. 11, Nov. 1955, Uncl.

RAIKOV, L.

The one-piece flexible girder fastened in a pressed chain in railroad bridges. A fifty-meter chimney made from prefabricated reinforced-concrete blocks. Tr. from the Russian.

pages 4-7 (STROITELSTVO) Vol. 4, no. 6, 1957,
Sofiia, Bulgaria

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

VESHOV, D., inzh.; RAIKOV, Kr., inzh.

On the scientific application of bitumen in highway construction. Stroitelstvo 9 no.4:17-20 Jl-Ag '62.

MILCHEVA, M.; RAIKOV, L.

Extent of the P^{32} phosphorus secondary fixation determined in the process of preparing soil extracts. Iav Inst "Nikola Pushkarov" 6:85-91 '63.

[illegible], Ts., prof. d-r; GALEVA, V., d-r; PALAVEEV, T., d-r; RAIKOV, L.

Prof. Tsvetan Staikov, Corresponding Member of the Bulgarian Academy of Agricultural Sciences, is sixty. Izv. Inst "Nikola Pushkarov" 7:5-6 '63.

1. Chlenovi na Redaktsionnata kolegiia, "Izvestiia na Instituta za poznavoznanie i agrotekhnika 'Nikola Pushkarov'".

BEKHAR, A.; RAIKOV, L.

Clay minerals and general chemical composition of saline and nonsaline soils. Izv Inst "Nikola Pushkarov" 7:115-124 '63.

1. Chlen na Redaktsionnata kolegiia, "Izvestiia na Instituta za pochvoznanie i agrotekhnika 'Nikola Pushkarov'" (for Raikov).

RAIKOV, L., st. n. sutr.; BEKHAR, A.

Saline soil at the village Belozem, district of Plovdiv.
Izv Inst "Nikola Pushkarov" no.3:25-58 '62.

1. Chlen na Redaktsionnata kolegiia, "Izvestiia na Tsentralniia nauchnoizsledovatelski institut po pochvoznanie i agrotekhnika 'Nikola Pushkarov'" (for Raikov).

RAIKOV, L., st. n. sutr.

A symposium on the use of marked atoms in pedology. Priroda Bulg 11 no. 6:95-96 N-D '63.

1. Tsentralen nauchnoizsledovatelski institut po pochvoznanie i agrotekhnika "N. Pushkarov".

RAIKOV, L.
"Soil and irrigation" (p.23) PRIRODA
(Bulgarska Akademiia Na Naukite) Sofiya Vol 3 No 1 Jan/Feb 1953

SO: East European Accessions List Vol 2 No 6 Aug 1954

RAIKOV, L.

"V. V. Dokuchaev, Creator of Soil Science." p. 79 (PRIRODA, Vol. 2, No. 4, July/Aug., 1953, Sofiya.)

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

RAIKOV, P.

Content of copper in the products of confectionary enterprises. p. 11
(Leka Promishlenost, Vol. 5, no. 12, 1956, Bulgaria)

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

Naikov P.N.

PROFESSOR P. N. NAIKOV

TECHNOLOGY

Periodical: KHIMIIA I INDUSTRIIA. Vol. 30, no. 5, 1958

PROFESSOR P. N. NAIKOV. One of the founders of the Sofia State University.
p. 155.

Monthly List of Last European Accession (LEAI), LC., Vol. 8, no. 2,
February 1959, Unclass.

TSENOVA, A., inzh.; PAVLOV, P., inzh.; RAIKOV, R., inzh.

The Dospat-Krichim waterfall. Elektroenergiia 14 no.2:1-7 F '63.

RAIKOV, B.

"Comparative regulation of electric-power production."

p. 3 (Elektroenergiia, Vol. 9, no. 1, 1958, Sofiia, Bulgaria)

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

RAIKOV, R., prof.

Surgical therapy of cardiospasm. Khirurgiia, Sofia 14 no.2/3:354-355 '61.

(CARDIOSPASM surg)

[illegible]

MAIKOV, K. Mechanization of work in low-voltage industry. p. 47.

Vol. 9, No. 5, Sept./Oct. 1956.
ELEKTRIFIKATSIYA.
ELEKTROTEKHNIKA
Sofiia, Bulgaria

So: East European Accession, Vol. 6, No. 3, March 1957

STOIANOV, Marko, inzh.; RAIKOV, Raiko, inzh.

The Sandanska Bistritsa Rapids. Elektroenergiia 15 no.5:2-6 My '64

MIKHAILOV, Mikhail; RAIKOV, Raiko

Possibilities for automatic adjustment of the position of tractor-mounted plows to the relief in the vertically longitudinal plane. Izv mekh selsko stop BAN 4 97-106 '63.

KAIKOV, S.

Results from technical standardization in the furnace section of the V. Kolarov State Cement Plant. p. 55.
Heavy industry in Czechoslovakia during the Second Five-Year Plan. p. 59.
Heavy industry in Hungary during the Second Five-Year Plan. p. 60.
Successes of heavy industry in Yugoslavia. p. 61.
Japanese chemical industry. p. 61

KHIMIA PROMYSHLENOST. Vo . 5, no. 5, 1956

Sofiia, Bulgaria

SOURCE: East European Accessions List (EEAL) Library of Congress, Vol. 6, No. 1, January 1957

RAIKOV, S.

Overexpenditure must not be allowed with the "working wages" fund of the Mining Enterprise for Nonmetallic Minerals. p. 78. Vol. 10, No. 3, May/June 1955. MINNO DELO. Sofiya, Bulgaria.

SOURCE: East European Accessions List, (EEAL) Library of Congress, Vol. 5, No. 1, January, 1956.

DIMITROV, R., d-r; RAIKOV, Ts.; PETKOV, Iv.

Methods of testing and computing the noble and rare-metals and dispersed elements in the nonferrous-metal ores in Bulgaria. Min delo 17 no.7:22-24 Jl '62.

1. Upravlenie "Geolozhki prouchvaniia i okhrana na zemnite nedra".

RAIKOV, T.

Inhabitants of Zempoaltepetl Mountain in Mexico.

P. 16, (Geografiia) Vol 7 no. 6, 1957, Sofia, Bulgaria

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No.11 November 1957

RAIKOV, V.

Lifesaving of the drowning. The road of Mikhail Margolin, a revolver con-
ctructer.

pages 22-23 (ZA RODINATA) Vol. 7, no. 7, July 1957,
Sofiia, Bulgaria

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

RAIKOVA, Bl.

Pollution of the air over Sofia with sulfur oxide.
Khidro i meteorolog 13 no. 2:45-50 '64.

RAIKOVA, D.

New hypotheses on the solar activities. Nauka i tekh mladezh 16 no.1: 41-44 Ja'64.

ZIDAROV, D.; RAIKOVA, D.

Eliminating disturbing effect of the walls in electrolytic baths. Doklady BAN 15 no.3:261-264 '62.

1. Note présentée par L. Krastanov [Krustanov, L.], membre de l'Académie, membre du Comité de rédaction et rédacteur responsable, "Doklady Bolgarskoy Akademii Nauk."

RAIKOVA, D.

Celestial omens. Nauka i tekh mladezh 16 no.12:19-24 '64.

RAIKOVA, Donka, d-r

The star path. Nauka i tekh mladezh 14 no.12:22-23 '62.

1. Astronomicheska sektsiia bri Bulgarskata akademiia na mukite.

MANOLACHE, Mircea, conf. ing.; BODEA, Ion, asistent ing.; RAILEANU, Dumitru, asistent ing.; SAS, Ion, asistent

Corrosion of aluminum and its alloys. Metalurgia constr mas 8 no.11: 937-950 N '61.

(Corrosion and anticorrosives)
(Aluminum alloys)

R/009/61/000/011/001/001
D282/D303

AUTHORS: Manolache, Mircea, Instructor, Engineer, Bodea, Ion, Assistant, Engineer, Răileanu, Dumitru, Assistant, Engineer, and Sas, Ion, Assistant

TITLE: On the corrosion of aluminum and its alloys

PERIODICAL: Metalurgia şi construcţia de maşini, no. 11, 1961, 937-950

TEXT: The article presents the results of experiments by the authors on the corrosion of aluminum and aluminum-alloy sheets in the various conditions of the Galati and Constanta harbors. The authors used in their experiments commercial aluminum of the following composition: 0.05% Fe, 0.31% Zn, 0.03% Mg, and the rest aluminum, as well as aluminum alloyed with 5% Cu and 3% Zn. Commercial aluminum was rolled into 1.5 - 2 mm thick sheets, while aluminum alloy into 4 - 6 mm thick sheets. The following

Card 1/5

On the corrosion ...

R/009/61/000/011/001/001
D282/D303

corrosion media were selected: (1) Danube water; (2) Danube atmosphere; (3) Black Sea water; (4) Black Sea atmosphere; (5) town atmosphere of Galati; and (6) Sea water brought into the laboratory. Since in ship or harbor constructions the aluminum generally comes into contact with other materials, the authors selected the following contact hypotheses: (1) without any contact to other material; (2) in contact with OL 38 steel; (3) in contact with copper; (4) in contact with bronze mixed with tin; (5) in contact with fir-wood; (6) in contact with zinc; and (7) in contact with oak-wood. The samples were tested with or without protection, i.e. (1) without any protection; (2) anodically oxidated; (3) painted, and (4) anodically oxidated and painted. The results obtained by the authors completely verified the modern corrosion theories. Thus, in case of commercial aluminum, an anodic dissolution was produced on the samples. This anodic dissolution was increasingly reduced due to a passivity process. In case of samples made from aluminum alloyed with Cu and Zn, the corrosion velocity permanently increased due to the action of

Card 2/5

On the corrosion ...

the cathodic inclosures. A general passivity of the metal or alloy is only produced if there are some conditions of an anodic passivity of the anodic components. Knowing the appearance mechanism of the anodic passivity, the potential up to which the anode has to be polarized, can be calculated. Preliminarily oxidated aluminum samples were more electronegative; the potentials tended towards a stability, i.e. passivity; and the dissolution current had an increasing tendency. In case of aluminum samples alloyed with Cu and Zn, the potential and the current had a continuously increasing tendency. The powerful corrosion of the alloyed samples which in some cases even led to pitting, was especially due to an increase of the number and size of the cathodic inclosures. The corrosion of the commercial aluminum samples was characterized by a surface corrosion, while that of the aluminum-alloy samples by an intercrystalline corrosion. The most powerful corrosion effect on commercial aluminum samples was exerted by Black-Sea-water, while on aluminum alloy samples

Card 3/5

R/009/61/000/011/001/001
D282/D303

On the corrosion ...

by Black-Sea and Danube waters. The average corrosion depths in the case of commercial aluminum samples was 60 μ , while in case of aluminum alloy samples it was almost 0.5 mm. However, the corrosion process did not vary proportionally with the time. The corrosion velocity increased the longer the aluminum alloy samples were kept in the corroding media, and decreased the longer the commercial aluminum samples were subjected to the activity of the corroding media. The authors draw the following preliminary conclusions: (a) Commercial aluminum is less corroded than aluminum alloyed with Cu and Zn. (b) The most powerful corrosion is produced by Black-Sea water, followed by Danube water. Sea water in the laboratory produced corrosions similar to corrosions produced by the sea-atmosphere. (c) Protecting layers have only delayed the corrosion of all samples submerged in natural waters, but proved to be more efficient in the case of samples subjected to atmospheric corrosion. (d) Generally, the contact materials increased the corrosion effects

Card 4/5

on the samples. (e) Most powerful corrosions were found on samples in contact with copper and bronze. (f) The decreasing order of the influence of the contact material on aluminum and aluminum-alloy samples, independently of the corroding media, was: copper, bronze, fir-wood, oak-wood, steel and zinc.(g) Zinc delayed the corrosion of aluminum and aluminum-alloys. The corrosion of all samples in the atmosphere was generally weak, superficial and uniform, being more powerful under a contact material. Red-lead proved to be a good protecting layer. Anodically oxidated and painted samples were not at all corroded, while painted samples were slightly corroded especially when being in contact with copper and bronze. There are 21 figures, 5 tables and 15 references: 11 Soviet-bloc and 4 non-Soviet-bloc. The reference to the English-language publication reads as follows: J. Sundarjan and T.L. Rama Char: " Inhibition of the Corrosion of Aluminum in Alkaline Solutions", Corrosion prevention and Control, 5, 1958, no. 5, 55-56.

CIORANESCU, Ecaterina; NAIDIN, Ion

Potential anticancer agents. Pt 2. Rev chimie 8 no.1:21-29 '63.

1. Institute of Chemistry of the Academy of the R.P.R. Bucharest.
2. Corresponding Member of the Academy of the R.P.R. (for Cioranescu).

ION, Ilie; BAILEANU, D. (Bucuresti)

"Geomorphology" by Gr. Posea, V. Velcea, L. Cojocaru. Reviewed by Ilie Ion, D. Baileanu. Natura Geografie 15 no.6:91 N-D '63.

RAILEANU, D.; MENITESCU, C.D., [illegible]

Synthesis of some 5,6,7-trimethoxy-indole derivatives.
Studii cerc chim 11 no.1:19-36 '63.

1. Sectia de chimie organica a Centrului de cercetari chimice al Academiei R.P.R., Bucuresti.

NENITSESKU, K.D. [Nenitzescu, C.D.] (Bucharest); RAILEANU, D. [Raileanu, D.]; ANGELIDE, N. [Angelide, N.]

New synthesis of the ester of 3-indolylpyroracemic acid. Rev chimie 8 no.1:59-63 '63.

1. TSentr khimicheskikh issledovaniy Akademii RNR Otdel organicheskoy khimii, Bukharest.

RAILEANU, G. ; RADALUTA, A.

Study of the fauna of Aptychus in the calcaria of the superior Jurassic of the Svinita-Svinicea Mare zone. p. 223.
(ANALELE. SERIA STIINTELOR NATURII, Rumania. Vol. 5, no. 11, 1956)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no.7, July 1957, Incl.

RAILEANU, Gr.; RUSU, A.

Contributions to the knowledge of the Lower Carboniferous from the Drencova area (Banat). Studii cerc geol 7 no.3/4:401-408 '62.

RAILEANU, Gr., [illegible], S., [illegible], C.

New data on the western tectonic boundary of the Resita (Banat) area. Rev geol geog Rum 7 no. 2: 199-202 '63.

RAILEANU, Gr.; NASTASEANU, S.; BOLDUR, C.

New data on the west tectonic limit of the Resita zone (Banat).
Studii cerc geol 8 no.1:7-11 '63.

1. Communicare prezentata de academician G. Murgeanu.

RAILEANU, Gr.; NASTASEANU, S.

On the presence of a form of Arthrophycus alleghaniensis (Harlan) in the Transylvanian Alps. Communicarile AR 13 no.5:439-443 My '63.

1. Comunicare prezentata de academician M.G. Filipescu.

RAILEANU, Gr.; IONDAN, Magdalena

Study on the Liassic brachiopods in the Svinita region. Studii cerc geol 9 no.1:3-24 '64

1. Chair of Geology of the Faculty of Geology and Geography of the Bucharest University.

RAILEANU, Gr.; POPESCU, Gh.

Micropaleontologic study of the Lower Cretaceus at Svinita (Southern Banat). Studii cerc geol 9 no.1:51-60 '64

1. Institute of Geology and Geography of the Rumanian Academy, Bucharest.

RAILEANU, Gr.; NEGULESCU, V.

Comparative study of the Burdigalian fauna in the Transylvania Basin and the Petroseni Basin. Anuarul Comit geol 34 pt.1:159-189 '64.

1. Submitted Janurary 1964.

RAILEANU, Gr.; RUSU, A.; MOISESCU, V.

Tectonic relations of the crystalline of the Maramures Mountains with sedimentary formations of the Transylvanian Basin. Rev. roum. geol. geof. geogr. 7 no.2:251-262 '63.

1. Geologic Institute of the Geologic Committee and the Institute of Geology and Geography of the Rumanian Academy. Submitted June [illegible].

Gr. [illegible]

[illegible] of the Galic[illegible] in the Resita [illegible] good geof geogr [illegible] 2:2[illegible]75 '62.

[illegible] Faculty of Geology and Geography, University of Bucharest. [illegible], 1963.

NICULESCU, Ion T.; GAHGI-PARSCHIV, A.; ONICESCU, Doina; RAILEANU, Iona; GIUGARIU, D.; DEDIU, St.; OPRESCU-LISSIVIEVICI, Elena; TRIFU, P.

Contribution to the study of nerve endings in the pancreas. Rumanian M. Rev. 1 no.2:5-10 Apr-June 57.
(PANCREAS, innervation
anat. of nerve endings)

RUMANIA/Human and Animal Morphology (Normal [illegible]) S
Nervous System

Abs Jour : Ref Zhur - Biol., No 7, 1958, No 31227

Author : Niculescu Ion T, Hagi-Paraschiv A., Enachescu Aurelia, Badescu Ruxanda, Raileanu Ioana.

Inst : Not Given

Title : Concerning the Nerve Endings of the Digestive Apparatus: the Stomach and the Duodenum.

Orig Pub : Bul. stiint. Sec. med., 1956, 8, No 1, 101-150

Abstract : The stomach and intestine of dogs, cats, rabbits, rats and mice were stained with methylene blue; also used were impregnation with silver, Nissle body stain in different cytological methods. In the Auerbach system, the networks possess ganglia which lie under the serous membrane. Especially numerous are ganglia in the musculature of Oddi's sphincter. The ganglia are rich in blood vessels. Ganglictic cells of the Meissner plexus are smaller; they possess thinner synaptic apparatuses. In the muscle layer, at different pH values, the

Card : 1/2

HAGI-PARASHIV, A., Assit. Prof.; ENACHESCU, A.; ONICESCU, Doina; SMOLENSCHI-POTIN, Ludmila; BOCIRNEA, C.; LISSIEVICI-OPRESCU, Elena; MEDIU, St.; RAILEANU, Ioana; RADU, Sorina

Contributions to the study of terminal nerve structures in the peritoneum. Rumanian M. Rev. 2 no.2:9-10 Apr-June 58.

(PERITONEUM, innerv.
terminal nerve structures)

NICULESCU, I.T.,; PARASCHIV, Hagi, A.,; ENACHESCU, Aurelia,; BADESCU, Ruxandra,; RAILEANU, Ioanna.

Study of the nerve endings of the liver and bile ducts. Bul. stiint. sect. med. 7 no.2:609-620 Apr-June 55

(LIVER, innervation
nerve endings, in exper. animals, histol.)
(GALLBLADDER, innervation
nerve endings, in exper. animals, histol.)
(BILE DUCTS, innervation
nerve endings in exper. animals, histol.)

NICULESCU, Ion, T., membru corespondent al Academiei R.P.R.;
HAGI-PARASHIV, A.; ENACHESCU, Aurelia; BADESCU, Ruxanda;
RAILEANU, Ioana

The nerve endings of the digestive tract: stomach and duodenum.
Bul. stiint. sect. med. 8 no.1:101-150 Jan-Mar 56.

(NERVE ENDINGS
of stomach & duodenum, in various animals)
(STOMACH, innervation
nerve endings, in various animals)
(DUODENUM, innervation
neve endings, in various animals)

BERCEANUM, St.; GOCIU, Mariana; RAILEANU, Ioana

Studies of the behavior of hematopoietic cells in tissue culture. Stud. cercet. med. intern. 6 no.1:25-29 '65.

RAILEANU, L.

Quality of products in state and cooperative commerce. p. 20.

Vol. 8, no. 1, Jan 1956
STANDARDIZARE
Bucuresti, Rumania

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

RAILEANU, M.

3

JAJ(NB)

Preparation of phenothiazine 5-oxide. C. Bodea and M. Răileanu (Acad. R.P.R., Cluj, Romania). *Acad. rep. populare Romîne, Filiala cluj, Studii cercetări chim.* 11, 129–33(1960).—Optimal conditions for prepg. phenothiazine (Ia) 5-oxide (I) from *N*-benzoylphenothiazine (II) were investigated, and a synthesis of I was achieved. II, obtained from 50 g. Ia and 32.5 cc. BzCl, was treated in 500 cc. AcH with 62.5 cc. HNO_3 (d 1.5), the mixt. agitated 10 min., and poured into H_2O to yield *N*-benzoylphenothiazine 5-oxide (III). III, recrystd. from PhMe was refluxed in 750 cc. EtOH 5 min., 150 cc. 10% aq. NaOH soln. added, the whole refluxed again 15 min., and cooled to give I, m. 257–8°. The yield (on Ia) was 84%. Treating III with Zn powder gave II. I and III were sol. in MeAc, AcH, moderately sol. in EtOH. I was slightly sol. in PhMe.

T. Szél

RUMANIA / Organic Chemistry--Synthetic Organic Chemistry G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27510

Author : Bodea, C. and Raileanu, M.
Inst : Rumanian Academy of Sciences
Title : The Nitration of Phenothiazine

Orig Pub: Studii si Cercetari Chim Acad RPR, Fil Cluj, 8, No 3-4, 301-313 (1957) (in Rumanian with French and Russian summaries)

Abstract: For the purpose of studying the biological properties of nitroderivatives of phenothiazine (I), the authors have investigated the nitration of I and of the 5,5-dioxide of I (II). 3,7-dinitrophenothiazine (III) was prepared and oxidized to the 5,5-dioxide (IV) with H_2O_2; IV was also prepared by the nitration of II and

Card 1/5

RUMANIA / Organic Chemistry--Synthetic Organic Chemistry G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27510

Abstract: 90%, mp 172-173° (from alc). A boiling solution of 10 gms IX in 85 ml CH_3COOH is treated with 10 ml 30% H_2O_2, heated for 1.5 hrs (adding 10 ml portions of H_2O_2 every 30 min for a total of 30 ml), and the solution is allowed to stand 14-16 hrs; the 5,5-dioxide of IX is obtained, yield 92%, mp 246-247° (from benzene); hydrolysis of the product obtained with 10% alcoholic KOH gives II, yield 78%, mp 255-256° (from CH_3COOH). A suspension of 5 gms III in 0.1 liter CH_3COOH is treated dropwise with a solution of HNO_3 (d 1.42) in CH_3COOH (1:1) until the solution of III is complete and the solution is diluted with water; V is obtained, yield 65%, mp 309-310° (from aniline). 5 gms V are oxidized

Card 3/5

RUMANIA / Organic Chemistry--Synthetic Organic Chemistry G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27510

Abstract: with H_2O_2 (see IX) and IV is obtained, yield 85%, mp 337-338° (from $C_6H_5NO_2$ or aniline). 2 gms of powdered II are added gradually to a solution of 50 ml HNO_3 (d 1.5) in 150 ml water, the solution is stirred for 15-20 min, and allowed to stand for 8 hrs with periodic stirring; VI is obtained, yield 70%, mp 344-345°(from $C_6H_5NO_2$). 5 gms I are gradually added to a mixture of 30 ml HNO_3 (d 1.5) and 15 ml 20% oleum [fuming H_2SO_4], the mixture is heated for 20 min at 100°, and ice water is added to precipitate VII, yield 85%, mp 354-355° (from $C_6H_5NO_2$). A similar procedure is followed in preparing VIII from II, yield 90%, mp 346-347° (from $C_6H_5NO_2$). VIII is obtained in equal yield by the oxidation of VII with H_2O_2 or

Card 4/5

RAILEANU, M.

Distr: 4E3d

Nitration of phenothiazine. C. Bodea and M. Raileanu. (*Acad. rep. populare Romîne, Filiala Cluj*). *Studii cercetări chim.* 8, 303–13(1957).—Through a systematic study of the nitration of phenothiazine (I) and phenothiazine 5,5-dioxide (II) it was shown that of all nitrated derivs. of I described only 3-nitrophenothiazine 5-oxide (III) corresponded to a pure product. H_2O_2 oxidn. of III produced 3-nitrophenothiazine 5,5-dioxide (IV). IV was also prepd. from II (2 g.) added slowly to a soln. of HNO_3 (50 ml. d. 1.50) and H_2O (150 ml.). After 8 hrs. with intermittent stirring, filtration, and washing with H_2O and alc., 70% IV was obtained, yellow prisms, m. 344–5° ($PhNO_3$). 3,7-Dinitrophenothiazine (V) was prepd. from 5 g. I by dissolving in $CHCl_3$ and 10 ml. AcOH and adding to 5 g. $NaNO_2$ and at 1-hr. intervals adding two 5-ml. portions of AcOH. The brown ppt. was filtered off, washed with glacial AcOH, alc., H_2O and finally with alc. to give 55–60% V, brown needles, m. 286–7° (aniline). Oxidn. of V with 1:1 HNO_3 (d. 1.42) and glacial AcOH produced 65% of 3,7-dinitrophenothiazine 5-oxide (VI), yellow needles, m. 309–10° (aniline). H_2O_2 oxidn. of VI yielded 85% 3,7-dinitrophenothiazine 5,5-dioxide (VII), m. 377–8° ($PhNO_3$ or $PhNH_2$). VII was also prepd. in 35% yield from direct nitration of II. 1,3,7,9-Tetranitrophenothiazine 5-oxide (VIII) was prepd. from 5 g. I, introduced in small amts. to a mixt. of HNO_3 (d. 1.50, 30 ml.) and 20% oleum (15 ml.) and then heated on a water-bath 20 min. The mixt. was then poured on ice and the ppt. filtered off, washed with H_2O and then alc. to give 85% VIII, yellow-orange needles, m. 354–5° ($PhNO_3$). Oxidn. of VIII with 30% H_2O_2 produced 90% 1,3,7,9-tetranitrophenothiazine 5,5-dioxide (IX), m. 346–7° ($PhNO_3$). Nitration with HNO_3-oleum (as for VIII) produced 90% IX from II and 75% IX from VII.

Michael Cais

3
1-BW(BN)
1-JAT(WB)
1

RUMANIA / Organic Chemistry--Synthetic Organic Chemistry G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27510

Author : Bodea, C. and Raileanu, M.
Inst : Rumanian Academy of Sciences
Title : The Nitration of Phenothiazine

Orig Pub: Studii si Cercetari Chim Acad RPR, Fil Cluj, 8, No 3-4, 301-313 (1957) (in Rumanian with French and Russian summaries)

Abstract: For the purpose of studying the biological properties of nitroderivatives of phenothiazine (I), the authors have investigated the nitration of I and of the 5,5-dioxide of I (II). 3,7-dinitrophenothiazine (III) was prepared and oxidized to the 5,5-dioxide (IV) with H_2O_2; IV was also prepared by the nitration of II and

Card 1/5

114

RUMANIA / Organic Chemistry--Synthetic Organic Chemistry G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27510

Abstract: 90%, mp 172-173° (from alc). A boiling solution of 10 gms IX in 85 ml CH_3COOH is treated with 10 ml 30% H_2O_2, heated for 1.5 hrs (adding 10 ml portions of H_2O_2 every 30 min for a total of 30 ml), and the solution is allowed to stand 14-16 hrs; the 5,5-dioxide of IX is obtained, yield 92%, mp 246-247° (from benzene); hydrolysis of the product obtained with 10% alcoholic KOH gives II, yield 78%, mp 255-256° (from CH_3COOH). A suspension of 5 gms III in 0.1 liter CH_3COOH is treated dropwise with a solution of HNO_3 (d 1.42) in CH_3COOH (1:1) until the solution of III is complete and the solution is diluted with water; V is obtained, yield 65%, mp 309-310° (from aniline). 5 gms V are oxidized

Card 3/5

RUMANIA / Organic Chemistry--Synthetic Organic Chemistry G-2

Abs Jour: Ref Zhur-Khimiya, No 8, 1959, 27510

Abstract: or by the nitration of IV. -- A. Marin

Card 5/5

Country : RUMANIA
Category: Organic Chemistry. Organic Syntheses G

Abs Jour: RZhKhim., No. 17, 1959, No. 60901

Author : Bodea, C.; Rosiescu, M.
Inst : -
Title : Chloro-Nitro-Derivatives of Phenthiazine Synthesized by the Direct Chlorination and Nitration.

Orig Pub: Studii si cercetari chim. Acad. RPR Fil. Cluj, 1958, 9, No 1-4, 159-166

Abstract: The direct chlorination of phenthiazine (I) in $CHCl_3$ yields 3, 7-dichloro-I (II) and 1, 3, 7 9-tetrachloro-I (III); the products of mono-or tri-chlorination, thereby, are not formed.

Card : 1/7

Country : RUMANIA
Category: Organic Chemistry. Organic Syntheses

G

Abs Jour: RZhKhim., No 17, 1959, No. 60901

nitro-7-chlorophenthiazines (VI, VII), and from II are obtained 5-oxides of 1-nitro- and 1, 9-dinitro-3, 7- dichlorophenthiazines (VIII, IX). VI and VII are oxidized with H_2O_2 into the respective 5, 5-dioxides (VIa, VIIa). In the nitration of 5, 5-dioxide of 3, 7-dichloro-I (X) 5, 5-dioxides of VIII and IX are obtained (VIII a, IX a). In the nitration of IV, 9-nitro--IV (XI) is synthesized. V is oxidized into 5-oxide and 5, 5-dioxide of V (XII, XIII). To a weighed 21 gr I in 0.5 liter CH_3COOH are added, drop by drop and at a temperature $< 20^\circ$, 250 ml CH_3COOH, saturated Cl_2, the mixture is then

Card : 3/7

Country : RUMANIA
Category: RZhKhim., No 17, 1959, No. 60901

G

Abs Jour: Organic Chemistry. Organic Syntheses

poured into water, the residue is washed with acetone, thus obtaining III. The solution is then diluted with water and II is separated, with 33% yield and of 225-227° melting point (from benzene). Through the suspension, of 5 gr sulfone I in 280 ml CH_3COOH, Cl_2 is passed thus synthesizing IV, yield 54%, melting point 2 -256° (from benzene). 1 gr V is gradually introduced at 15-20° into 10 ml HNO_3 (d = 1.42), pouring the solution into water and separating VI of 253-254° melting point (from CH_3COOH); Analogically from 2 gr II and 50 ml HNO_3 (d = 1.42) IX is synthesized, yield 72%, melting point 299-300° (from aniline). By the same method, while employ-

Card : 4/7

Country : RUMANIA
Category: Organic Chemistry. Organic Synthesis.

Abs Jour: RZhKhim., No 17, 1959, No. 60901

alc.). In the nitration of X with HNO_3 (d = 1.42) VIIIa is obtained with yield of 80%, and melting point of 302-303° (from CH_3COOH). By employing HNO_3 (d = 1.5), IXa is obtained from X, yielding 82%, melting point 247-248° (from CH_3COOH), and XI is derived from IV, yield 58%, melting point 277-278° (from $C_6H_5NO_2$). Into a warm solution of 0.6 gr V in 50 gr CH_3COOH, 1 ml H_2O_2 is added, followed by 3-5 minutes heating, filtering, pouring into water, and producing XII, yield 58%, melting point 275-276° (from CH_3COOH). To 400 ml CH_3COOH is added a solution containing 5 gr V in 60 ml of conc. H_2SO_4, followed by heating, addition of 10 ml of 30% H_2O_2, boiling, while

Card : 6/7

6 2-may

7 7 7

Syntheses of heteroauxin, tryptamine, and serotonin. Costin D. Nenitzescu and Dan Ráileanu (Akad. Romanian Peoples Republic, Bucharest, Romania). *Chem. Ber.* 91, 1141–5(1958).—Powd. NaOAc (80 g.) added with stirring to 500 cc. Ac_2O, the mixt. treated rapidly with 100 g. *o*-$HO_2CC_6H_4NAcCH_2CO_2H$, m. 211°, refluxed 5 min. (CO_2 evolution), distd. to remove the excess Ac_2O, the residue heated with stirring with 750 cc. H_2O to boiling, cooled, filtered, the crude 1,3-diacetylindoxyl (about 85 g.) added to 120 g. $Na_2SO_3.7H_2O$ in 1.6 l. H_2O at 70°, the mixt. stirred 1.5 hrs. at 70° and cooled, and the product filtered off yielded 44 g. *1-acetylindoxyl* (I), m. 188°; *oxime*, m. 177° (decompn.) (50% EtOH); *2,4-dinitrophenylhydrazone*, m. 202° (decompn.) (pyridine). NH_4OAc (4 g.) in 75 g. PhOH warmed, treated with 15 g. $NCCH_2CO_2H$, 50 cc. xylene, and 15 g. I, refluxed 5 hrs. with the azeotropic removal of the H_2O, the mixt. steam distd. to remove the xylene, and the steam distn. residue allowed to stand overnight and recrystd. from aq. EtOH gave 10.5 g. *1-acetyl-3-indolylacetonitrile* (II), m. 112° (CCl_4). Crude II (20 g.) and 300 cc. 30% aq. NaOH refluxed 6–7 hrs. and acidified gave 13.5 g. *3-indolylacetic acid* (heteroauxin) (III), m. 164–5° (decompn.). II (1.2 g.) extd. into 1.0 g. $LiAlH_4$ in 80 cc. abs. Et_2O and the soln. of the product in Et_2O treated with 1 g. cryst. $(CO_2H)_2$ in 5 cc. EtOH yielded 1.1 g. *3-indolylethylamine* (*tryptamine*)-$(CO_2H)_2$, m. 147°. 2,5-$Cl(H_2N)C_6H_3CO_2H$ (20 g.) dissolved in 800 cc. 12.5% H_2SO_4 with warming, cooled, diazotized with 8 g. $NaNO_2$, added to 1 l. H_2O of 80°, and the product isolated with Et_2O yielded 16 g. *2,5-Cl(HO)C₆H₃CO₂H* (IV), m. 172°. IV (34 g.) and 8 g. NaOH in 100 cc. H_2O and 300 cc. EtOH refluxed 2 hrs. with 70 cc. $PhCH_2Cl$, treated dropwise with stirring at reflux during 2 hrs. with 200 cc. 17% aq. NaOH, refluxed 1 hr., freed of the EtOH, dild. with 600 cc. H_2O, washed with C_6H_6, treated with C, acidified with concd. HCl, and the cryst. ppt. recrystd. at −10° from 200 cc. EtOH and 100 cc. H_2O gave 38 g. *2,5-Cl(PhCH₂O)C₆H₃CO₂H* (V), m. 122° (EtOH). V (5 g.) and 2.5 g. $H_2NCH_2CO_2H$ dissolved with warming in a soln. of 2.5 g. KOH and 2.5 g. K_2CO_3 in 40 cc. H_2O, the soln. refluxed 4 hrs. with a little Cu powder, filtered, dild. with 400 cc. H_2O, and acidified with concd. HCl yielded 5.7 g. *2,4-HO₂C(PhCH₂O)-C₆H₃NHCH₂CO₂H* (VI), m. 221 (decompn.) (EtOH with H_2O). VI (15 g.) and 27 g. $Na_2CO_3.10H_2O$ in 300 cc. H_2O treated dropwise with shaking with 5.7 g. Ac_2O, shaken 1 hr., and acidified with concd. HCl to Congo red yielded 15.5 g. *N-Ac deriv.* (VII) of VI, m. 110° with previous sintering. VII (5 g.) treated in the usual manner with 25 cc. Ac_2O and 7 g. NaOAc yielded 4 g. *1,3-diacetyl-5-(benzyloxy)indoxyl* (VIII), m. 110° (EtOH). VIII (6 g.) added to 9.0 g. $Na_2SO_3.7H_2O$ in 180 cc. H_2O and 180 cc. EtOH at reflux temp., refluxed 1 hr., and allowed to stand overnight yielded 3.5 g. *1-acetyl-5-(benzyloxy)indoxyl* (IX), m. 170° (EtOH). $NCCH_2CO_2H$ (4.5 g.), 13.5 cc. xylene, and 1.5 g. IX added to 22.5 g. PhOH and 1.2 g. NH_4OAc and processed in the usual manner gave 1.25 g. *5-PhCH₂O deriv.* (X) of II, m. 138° (iso-PrOH). X (0.92 g.) treated with 0.5 g. $LiAlH_4$ in Et_2O and the Et_2O soln. of the crude product treated with 1 g. $(CO_2H)_2$ in 5 cc. EtOH yielded 0.76 g. *neutral oxalate* of the *5-PhCH₂O deriv.* (XI) of III, m. 162° (decompn.) (EtOH); *acid oxalate*, m. 197° (decompn.) (dioxane); *HCl salt*, 79% yield, m. 265° (EtOH-Et_2O). Neutral oxalate (0.2 g.) of XI in 15 cc. abs. EtOH treated

1/2 CG

Costin D. Nenitzescu and Dan Răileanu

with 0.1 g. $(CO_2H)_2$ in EtOH, hydrogenated over 0.1 g. 10% Pd-C, and filtered, and the filtrate dild. with dry Et_2O pptd. 0.13 g. *acid oxalate* of *serotonin*, m. 198° (decompn.) (abs. EtOH-Et_2O). X (1 g.) in 50 cc. Me_2CO treated with 40 cc. 2% aq. NaOH and 10 cc. 30% H_2O_2, kept 24 hrs. at room temp., refluxed 5 min., evapd. *in vacuo*, and the residue cooled deposited 0.56 g. *5-benzyloxy-3-indolylacetamide*, m. 148°.

F. W. Hoffmann

RAILEANU, T., dr.; IONES[illegible] dr.; FARCAS, Gh., dr.; ROZOR, Florica, dr.

Gastric polyps. [illegible] Ag '63.

1. Lucrare efectuata in Spitalul MTTC din Oradea.
(STOMACH NEOPLASMS) (POLYPI)

RAILEANU, Valentin, ing.

Influence of limestone granulation on the physicochemical properties of self-founding agglomerates. Metalurgia constr mas 14 no.4:289-293 Ap '62.

1. Combinatul siderurgic Hunedoara.

IFTIME, P., ing.; ROSCA, P., ing.; RAILEANU, V., ing.

Devices for protection from dangerous axial move in steam turbines. Energetica Rum 11 no.12:593-600 D'63.

FOLTICSKA, Maria, ing.; RAILEANU, Vasile, ing.;

Increasing the productivity of the agglomerating machines and widening of the fuel basis. Metalurgia Rum 15 no.5: 352-354 My '63.

TOLUBINSKIY, V.I. [Tolubyns'kyi, V.I.]; VOROB'YEV, P.I. [Vorobiov, P.I.]; RAILKO, G.A. [Railko, H.O.]; KOZLYUK, V.N. [Kozliuk, V.M.]

Pilot plant in Aleksandriya for studying the utilization of lignite for power fuel production. Zbir.prats' Inst.tepl.AN URSR no.23:49-56 '61. (MIRA 15:2)
(Aleksandriya--Coke)
(Lignite)

RAILKO, G.A.; BAZEYEV, Ye.T.

Industrial cyclone furnace. Energ. i elektrotekh. prom. no.1: 18-20 Ja-Mr '63. (MIRA 16:5)

(Furnaces)

RAILLO, A.

Griby Roda Fizarium (Fusarium Mushrooms)

410 p. 3.00

SO: Four Continent Book List, April 1954

RAILLO, A. I.

Fungi of the Genus Fusarium, State Publishers of Agricultural Literature, Moscow, 1950 415 pages. 464 07 R13.

SO: SIRA SI 90-53, 15 Dec 1953

RAILLO, A. I.

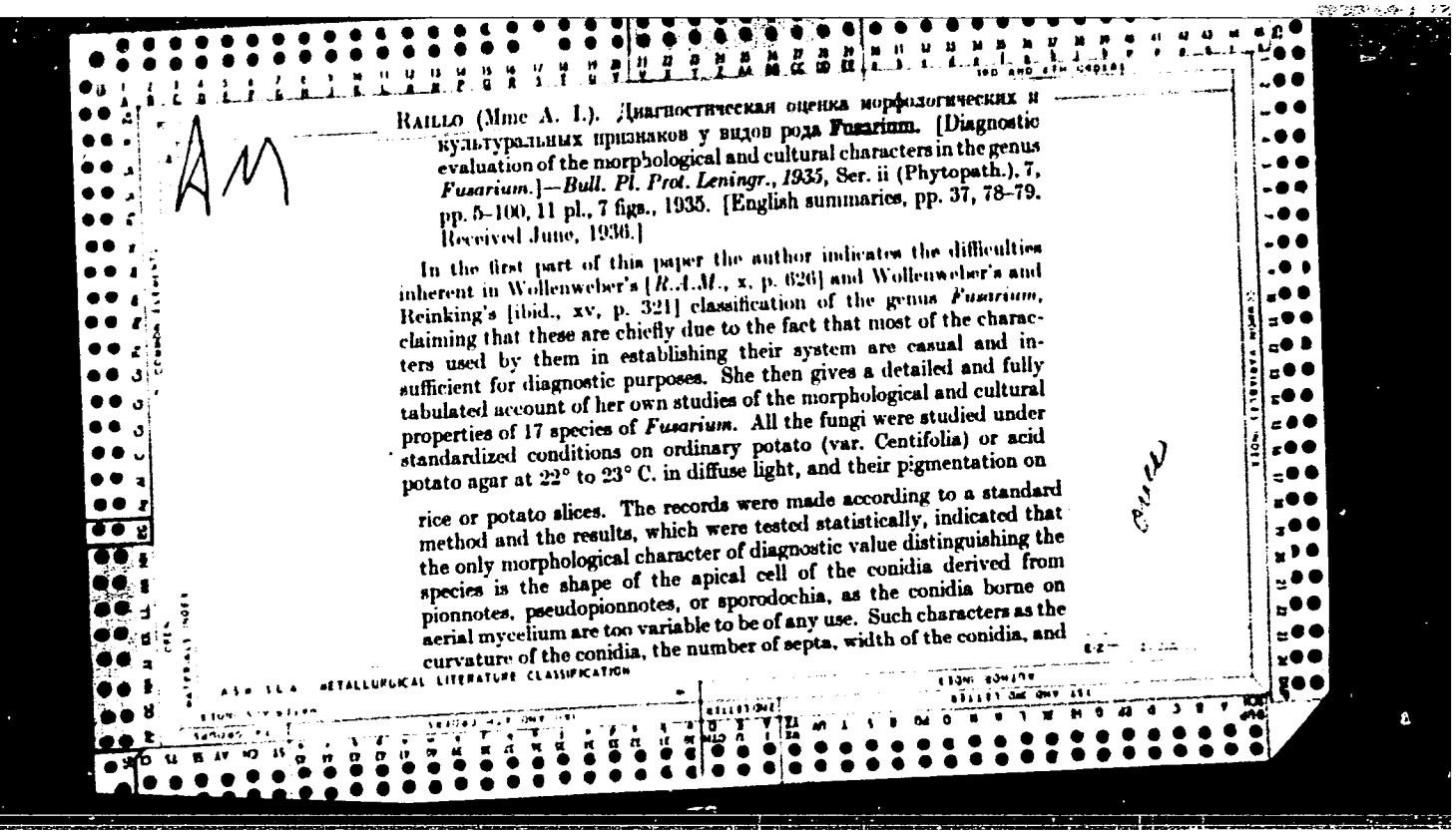
"Taxonomy of the Genus Fusarium and a Method for the Determination of the Species Belonging to It", Trudy Botanicheskogo Instituta Akademii Nauk SSSR, Seriia 2: Sporovye Rasteniia, no 3, 1936, pp 803-857 541 Sa 21P.

SO: SIRA SI-90-53, 15 Dec 1953

RAILLO, A. I.

"Diagnostical Estimation of Morphological and Cultural Characters of Species in the Genus Fusarium" Trudy po Zashchite Rastenii, Seriia 2, #7, 1935, pp 5-99, 423 92.

SO: SIRA SI 90-53, 15 Dec 1953

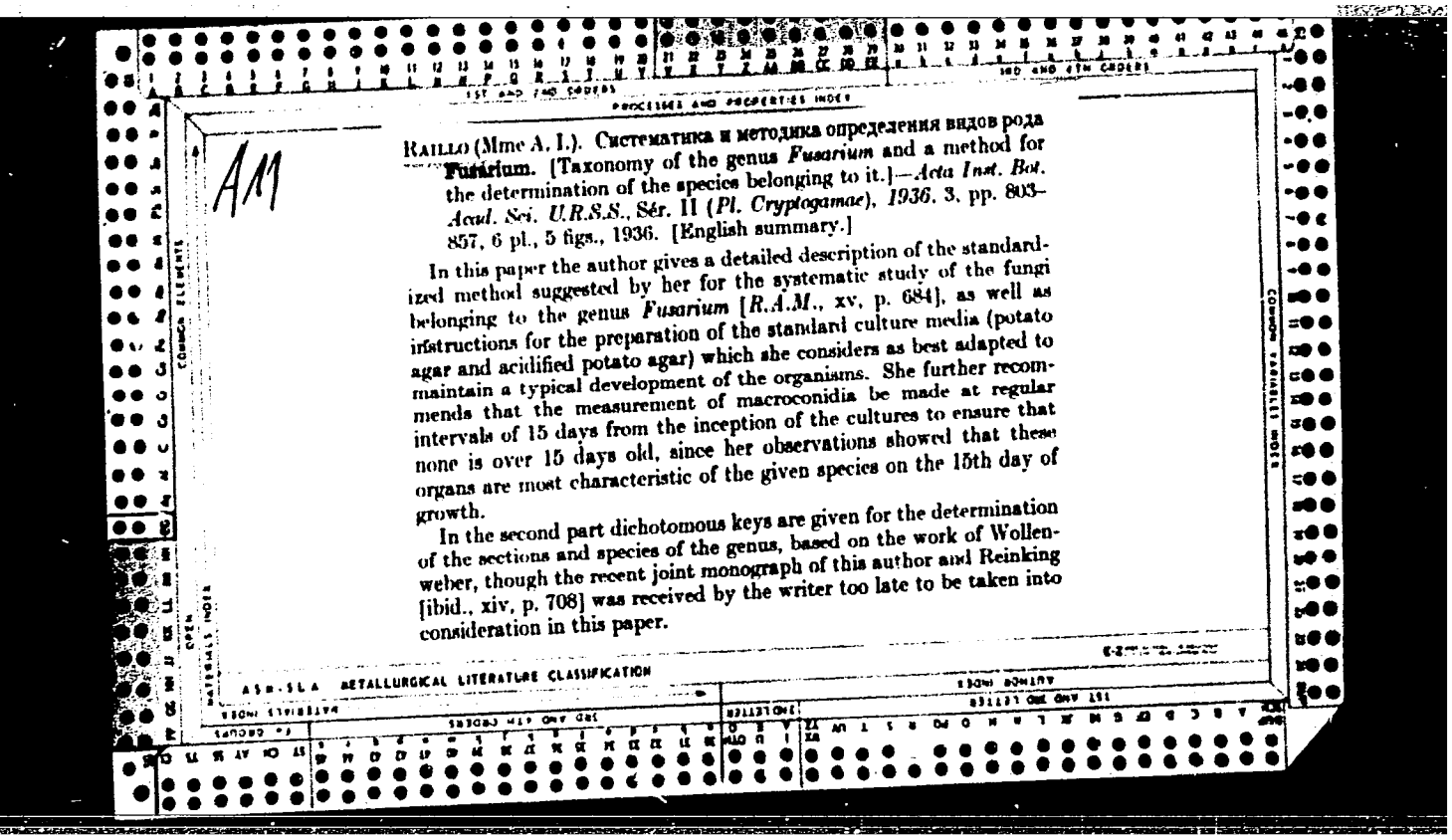


RAILLO (Mme A. I.). [Диагностическая оценка морфологических и культуральных признаков у видов рода **Fusarium**. [Diagnostic evaluation of the morphological and cultural characters in the genus *Fusarium*.]—*Bull. Pl. Prot. Leningr.*, *1935*, Ser. ii (Phytopath.), 7, pp. 5–100, 11 pl., 7 figs., 1935. [English summaries, pp. 37, 78–79. Received June, 1936.]

In the first part of this paper the author indicates the difficulties inherent in Wollenweber's [*R.A.M.*, x, p. 626] and Wollenweber's and Reinking's [ibid., xv, p. 321] classification of the genus *Fusarium*, claiming that these are chiefly due to the fact that most of the characters used by them in establishing their system are casual and insufficient for diagnostic purposes. She then gives a detailed and fully tabulated account of her own studies of the morphological and cultural properties of 17 species of *Fusarium*. All the fungi were studied under standardized conditions on ordinary potato (var. Centifolia) or acid potato agar at 22° to 23° C. in diffuse light, and their pigmentation on rice or potato slices. The records were made according to a standard method and the results, which were tested statistically, indicated that the only morphological character of diagnostic value distinguishing the species is the shape of the apical cell of the conidia derived from pionnotes, pseudopionnotes, or sporodochia, as the conidia borne on aerial mycelium are too variable to be of any use. Such characters as the curvature of the conidia, the number of septa, width of the conidia, and

the length of the apical cell can only serve to distinguish subspecies, varieties, or subvarieties, while cultural characters such as pigment, presence of sclerotia, and mode of spore formation are only indicative of forms. The data thus obtained are used in an attempt to outline a theoretical structure of the species in the genus *Fusarium* comparable with that already introduced into the classification of the phanerogams by Vavilov and other Russian authors, and which in the author's opinion should considerably simplify the present classification of the genus.

In the second part, the author describes her studies on the variability of the morphological and cultural behaviour of different single-spore isolates from single-spore cultures of the different species, the results of which showed that the shape of the apical conidial cell, the prevailing number of septa, and the shape of the curvature of the conidia remain constant in all the isolates derived from single-spore cultures. The length and width of the conidia, on the other hand, as well as the cultural characters, varied considerably in the isolates. On the whole, these results are considered to confirm the relative taxonomic value of the different characters as indicated in the first part of the paper.



A11

RAILLO (Mme A. I.). Систематика и методика определения видов рода **Fusarium**. [Taxonomy of the genus *Fusarium* and a method for the determination of the species belonging to it.]—*Acta Inst. Bot. Acad. Sci. U.R.S.S.*, Sér. II (*Pl. Cryptogamae*), *1936*. 3. pp. 803–857, 6 pl., 5 figs., 1936. [English summary.]

In this paper the author gives a detailed description of the standardized method suggested by her for the systematic study of the fungi belonging to the genus *Fusarium* [*R.A.M.*, xv, p. 684], as well as instructions for the preparation of the standard culture media (potato agar and acidified potato agar) which she considers as best adapted to maintain a typical development of the organisms. She further recommends that the measurement of macroconidia be made at regular intervals of 15 days from the inception of the cultures to ensure that none is over 15 days old, since her observations showed that these organs are most characteristic of the given species on the 15th day of growth.

In the second part dichotomous keys are given for the determination of the sections and species of the genus, based on the work of Wollenweber, though the recent joint monograph of this author and Reinking [ibid., xiv, p. 708] was received by the writer too late to be taken into consideration in this paper.

EWP(k)/EWT(m)/EWP(w)/ETI IJP(c) EM/WW/RM

ACC NR: AP6021699 SOURCE CODE: CZ/0032/66/016/001/0035/0040

AUTHOR: Raiman, J.--Rayman, Yu. (Engineer)

ORG: 'Victorious February' Works, Hradec Kralove (Zavody vitezneho unora)

TITLE: Ferritic structural steels for high-pressure vessels operating at low temperatures

SOURCE: Strojirenstvi, v. 16, no. 1, 1966, 35-40

TOPIC TAGS: structural steel, ferritic steel, welding technology

ABSTRACT: Experience is reported on the manufacture of large high-pressure vessels for chemical plants where they are exposed to low temperature. Czechoslovakia has 3 brands of ferritic steel suitable for this purpose (11 368 for temperatures to -50°C; 11 413, to -40°C; and 16 222, to -70°C) and each brand requires special technology and treatment. Particular attention is devoted to welding problems, composition of electrodes, heat treatment of welds, and the reliability of testing methods. Orig. art. has: 15 figures and 4 tables. [Based on author's Eng. abst.] [JPRS]

SUB CODE: 11, 13 / SUBM DATE: none / ORIF REF: 005 / OTH REF: 002

Card 1/1 UDC: 620.165:669.15-194.57:669.14.018.41

RAIMBEKOV, YE.S.

(29)

The Second All-Union Conference on Rhenium, sponsored by the Institute of Metallurgy imeni A. A. Baykov, Academy of Sciences USSR, and the State Institute of Rare Metals, was held in Moscow 19-21 November 1962. A total of 335 representatives from 83 scientific institutions and industrial establishments participated. Among the reports presented were the following: autoclave extraction of Re from Cu concentrates (A. P. Zelikman and A. A. Peredereyev); Re extraction from the gaseous phase (V. P. Savrayev and N. L. Peysakhov); recovery of Re by sorption and ion interchange (V. I. Bibikova, V. V. Il'ichenko, K. B. Lebedev, G. Sh. Tyurokhodzhayeva, V. V. Yermilov, Ye. S. Raimbekov, and M. I. Filimonov); production of carbonyl Re (A. A. Ginzburg); electrolytic production of high-purity Re and electroplating with Re (Z. M. Sominskaya and A. A. Nikitina); Re coatings on refractory metals produced by thermal dissociation of Re chlorides (A. N. Zelikman and N. V. Baryshnikov); plastic deformation and thermomechanical treatment of Re (V. I. Karavaytsev and Yu. A. Sokolov); growth of Re single crystals and effect of O_2 on their properties (Ye. M. Savitskiy and G. Ye. Chuprikov); Re-Mo, Re-W, and Re-precious-metal alloys (Ye. M. Savitskiy, M. A. Tylkina, and K. B. Povarova); synthesis of Re nitrides, silicides, phosphides, and selenides (G. V. Samsonov, V. A. Obolonchik, and V. S. Neshpor); weldability of Re-Mo and Re-W alloys (V. V. D'yachenko, B. P. Morozov, and G. N. Kiobanov); new fields of application for Re and Re alloys (M. A. Tylkina and Ye. M. Savitskiy); and Re-Mo alloy for thermocouples (S. K. Danishevskiy, Yu. A. Kocherzhinskiy, and G. B. Lapp). [WW]

Tsvetnyye metally, no. 4, Apr 1963, pp 92-93

L 23876-65 EWT(m)/EPR/EWP(t)/EWP(b) Ps-4 IJP(c) JD/MLK

ACCESSION NR: AT5002755 S/0000/64/000/000/0040/0043

AUTHOR: Lebedev, K. B.; Ageyev, S. A.; Okhotnikova, N. A.; Yermilov, V. V.; Raimbekov, Ye. S.; Filimonov, M. I.

TITLE: Recovery of rhenium from copper concentrates by alkaline leaching

SOURCE: Vsesoyuznoye soveshchaniye po probleme reniya. 2d, Moscow, 1962. Reniy (Rhenium); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1964, 40-43

TOPIC TAGS: rhenium, rhenium extraction, copper concentrate, alkaline leaching, rhenium cementation, potassium perrhenate

ABSTRACT: The authors propose a method for recovering rhenium in which the concentrate (about 30% copper, 3% lead, 2% zinc, and 0.003% rhenium) is leached with sodium hydroxide, rhenium and lead go into solution, and their cementation is then carried out on zinc. A complete flow diagram of the process is given, and the procedure is described in detail. The method is applicable to both copper and copper-lead rhenium-containing concentrates. The final recovery of the metals is tentatively estimated as follows: rhenium in potassium perrhenat, 50-55%; lead in crude lead, 20-25%; zinc in sheet zinc, up to 2%. Orig. art. has: 1 figure

Card 1/2

L 23876-65

ACCESSION NR: AT5002755

and 1 formula.

ASSOCIATION: None

SUBMITTED: 05Aug64 ENCL: 00 SUB CODE: MM

NO REF SOV: 011 OTHER: 000

Card 2/2

ARIFKHODZHAYEV, S.A.; RAIMBEKOV, Z.

Using electronic digital computers in construction management. Izv. AN Uz. SSR. Ser. tekh. nauk 9 no.6:14-18 '65 (MIRA 19:1)

1. Institut mekhaniki i Vychislitel'nyy tsentr AN UzSSR. Submitted June 25, 1965.

RAIMOV, Kh.S.

Biological characteristics of the grain leaf beetle. Zashch. rast. ot vred. i bol. 3 no.5:57 S-O '58. (MIRA 11:10)
(Beetles) (Grain--Diseases and pests)

VERETENNIKOV, Leonid Porfir'yevich, kand. tekhn. nauk, dotsent; RAIMOV, Mikhail Mikhaylovich, kand. tekhn. nauk, starshiy nauchnyy sotrudnik

Use of an analog computer in studying the stability of a synchronous generator in the small. Izv. vys. ucheb. zav.; elektromekh. 5 no.7:796-809 '62. (MIRA 15:10)

(Electric generators)
(Electronic analog computers)

VERETENNIKOV, Leonid Porfir'yevich; [illegible], Aleksandr Ivanovich, RAINOV, Mikhail Mikhaylovich; VENI[illegible], V.[illegible], doktor tekhn. nauk, prof., laureat Leninskoy premii, retsenzent; SHIROKHOV, Ye.I., nauchn. red.; [illegible], N.V., red.

[Modeling, computer techniques, and transient processes in electric ship propulsion systems] Modelirovanie, vychislitel'naia tekhnika i perekhodnye protsessy v sudovykh elektroenergeticheskikh sistemakh. Leningrad, Sudostroenie, 1964. 383 p. (MIRA 18:1)

SOV/144-59-2-2/19

AUTHORS: Ryabinin, I.A., Candidate of Technical Sciences, Lecturer and Raimov, M.M., Senior Scientific Worker

TITLE: The Use of Electronic Simulators for Investigating the Stability of Parallel Operation of Alternators of Comparable Power

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1959, Nr 2, pp 11 - 26 (USSR)

ABSTRACR: The transient behaviour of coupled alternators is strictly described by non-linear differential equations which are not solvable in their most general form. Even if the simpler problem of so-called static stability is resorted to, the high order of the system is a great disadvantage. It is, however, necessary to make a complete assessment of static stability in connection with present developments on the voltage- and frequency-control of alternators taking hunting into account. Refs 4, 9 and 10 describe how electronic computers, both analogue and digital, have been used to solve similar problems. The particular example studied is shown in

Card 1/3

The Use of Electronic Simulators for Investigating the Stability of Parallel Operation of Alternators of Comparable Power

Figure 1 as two coupled alternators feeding a load. The equations used were first proposed by A.A. Gorev (Ref 2). They are the set of ten denoted by (A). The power balance equations (active and reactive) are (6) and the voltage-regulator equations for a phase-compounded machine are (B). The complete system is tenth order and has 22 non-linearities. If the influence of transient oscillations of current on the rotor motion is neglected the order may be reduced to 6 and the non-linearities to 14. The number of function generators necessary for a conventional solution was not available and the investigation was thus limited to "small" scale. The equation system must first be linearized as Eq (1). This process takes into account: 1 - losses in the stator circuit; 2 - the saliency of the alternator poles; 3 - transient electromagnetic processes in the field and stator windings; 4 - the torque-speed mechanical characteristic of the prime movers; 5 - the static characteristics of the load for voltage and frequency; 6 - the automatic voltage

The Use of Electronic Simulators for Investigating the Stability of Parallel Operation of Alternators of Comparable Power

regulator. On the other hand, the influence of: a) the dynamic characteristics of the load; b) the dynamic characteristics of the prime mover speed regulator - are ignored. If it is supposed that each alternator is rated at 30 kVA and is loaded 50%, the insertion of numerical values gives Eq (2). The computer chosen is the MPT-9 containing 48 operational amplifiers with automatic zero setting. Each amplifier can sum up to 12 quantities. 48 constants and 48 variable coefficients can be set in. The variable is a direct voltage in the computing range ± 100 V. The maximum computing error does not exceed ± 0.5%. Drift is less than 100 μV over 10 minutes. The form of the equations as fed to the machine is Eq (5). The scale is chosen from a consideration of the peak values likely to be obtained. Each "machine" second represents 10 synchronous "alternator" seconds. Two coordinates, $\Delta S_{\sim}$ and ΔU, have been excluded as less important. As written, Eq (5) would require 70 voltage

Card3/5

The Use of Electronic Simulators for Investigating the Stability of Parallel Operation of Alternators of Comparable Power

dividers but the block diagram adopted (Figure 2) reduces this requirement to 64. Besides these, 11 summing, 10 integrating and 10 inverting amplifiers are used. The specific topics examined are: stability in the absence of voltage control; stability with voltage control; the effect of the slope of the torque-speed characteristic of the prime mover on the transient response; the effect of stator resistance on system behaviour. In each experiment, the constants have the same values and the disturbance is a unit function. Figure 3 was taken without voltage control. Figure 4 shows the effect of the excitation parameter K on parallel working. With $K > 1$ the system is unstable. Figure 5 shows the effect of damping torque when $K = 1.2$. The features specially stressed in this study are: relative simplicity of the method; comparatively little difficulty encountered; the direct, graphic appeal of the results; possibility of introducing non-linear effects. The disadvantage of relative inaccuracy is

The Use of Electronic Simulators for Investigating the Stability of Parallel Operation of Alternators of Comparable Power

not important in this application.
There are 8 figures and 10 references, 9 of which are Soviet and 1 English.

ASSOCIATION: Voyenno-Morskoy akademii korablestroyeniya i vooruzheniya imeni A.N. Krylova (The A.N. Krylov Naval Academy of Ship Building and Armaments)

SUBMITTED: December 15, 1958

RAIMOV, T.

Tashkent as an industrial and transportation center. Nauch. trudy TashGU no. 213 Geography no. 24:97-110 '63. (MIRA 17:5)

RAINOV, T.

Economic and geographical study of the construction industry of a large city. Nauch. trudy TashGU no.251. Trudy Nauch.-issl. otd. Geog. fak. no.3:10-17 '64. (MIRA 18:3)

GOLUBEVA, Z., strakhovoy delegat; RAIMOVA, N., strakhovoy delegat

Help for sick co-workers. Okhr. truda i sots. strakh. 5 no.9: 19 S '62. (MIRA 16:5)

1. Chulochno-trikotazhnaya fabrika, Smolensk.
(SMOLENSK--KNIT GOODS INDUSTRY--HYGIENIC ASPECTS)

RAIMOVA, N.I., assistent

Scalp forceps in individual forms of obstetrical pathology. Kaz. med.zhur. 40 no.6:76-78 N-D '59. (MIRA 13:5)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. A.B. Gillerson) Omskogo meditsinskogo instituta im. M.I. Kalinina.
(FORCEPS, OBSTETRIC)

RAIMOVA, N. I.

Cand Med Sci - (diss) "Nearest (in time) and remote results of operation on the position of obstetrical forceps." Kazan', 1961. 18 pp; (Ministry of Public Health RSFSR, Kazan State Med Inst); 200 copies; free; (KL, 7-61 sup, 261)

[illegible], [illegible]; [illegible]OVA, M.K.

Effect of experimental hypercholesterolemia and a partial denervation in frogs on the phenomenon of Sechenov's inhibition. Nauch. trudy Kaz. gos. med. inst. 14:221-222 '64. (MIRA 18:9)

1. Kafedra normal'noy fiziologii (zav. - prof. T.N.Volkova) Kazanskogo meditsinskogo instituta.

SHUMANOVA, A.A.; SOKOLOV, B.S.; CHERKASHENINA, Ye.F.; GARSKOVA, A.A., CHULKOV, M.P.; BORISENOK, V.G.; RAIMOVA, S.S.; KULIK, O.A.; UDALOVA, L.I.; KAZACHKOV, S.S., otv. red.; ZHDANOVA, L.P., red.

[Agroclimatic manual on Omsk Province] Agroklimaticheskii spravochnik po Omskoi oblasti. Leningrad, Gidrometeoizdat, 1959. 227 p. (MIRA 17:7)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gidrometeorologicheskoy sluzhby. Omskoye upravleniye. 2. Gidrometeorologicheskaya observatoriya Omskogo upravleniya gidrometeorologicheskoy sluzhby (for all except Kazachkov, Zhdanova).