

~~TEMNYI, V. P:~~ (IAT AN SSSR)

"The Scheme and the Principle of the Operation of A Hydraulic Observation Mortar."

~~XXXX~~

report presented at the Scientific Seminar on Pnsumo-Hydraulic Automation, 28-29 May 1957, at the Inst. for Automation and Remote Control (IAT), Acad. Sci. USSR

Avtomika i Telemekhanika, 1957, Vol. 18, No. 12, pp. 1148-1150, (author SEMIKOVA, A. I.)

Tom Nyy, V.F.

PLATE I BOOK EXCERPTS 807/807

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

HYDRAULIC AND PNEUMATIC DEVICES AND SYSTEMS OF AUTOMATIC REGULATION

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

HYDRAULIC AND PNEUMATIC DEVICES AND SYSTEMS OF AUTOMATIC REGULATION

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

HYDRAULIC AND PNEUMATIC DEVICES AND SYSTEMS OF AUTOMATIC REGULATION

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

Abstracts from 2001. Initial extraction of 2001/807. Similar to previous extraction of 2001/807.

ACCESSION NR: AP4011727

S/0119/64/000/001/0030/0031

AUTHOR: Tagayevskaya, A. A.; Temnyy, V. P.

TITLE: All-Union Conference on pneumatic and hydraulic automatic devices

SOURCE: Priborostroyeniye, no. 1, 1964, 30-31

TOPIC TAGS: automatic device, automatic control, USEPPA component, pneumatic automatic control, hydraulic automatic control, pneumatic hydraulic device conference, GRK-1 hydraulic regulator

ABSTRACT: The Sixth All-Union Conference on pneumatic and hydraulic automatic devices took place in Baku on October 14-17, 1963. The Conference was attended by 450 representatives of 202 organizations from 43 Soviet cities. Seventy reports were delivered. Universal USEPPA components were adopted at the Tizpribor plant, Moscow, for manufacturing over 20 various control devices made up from these components. Also, the Ust'-Kamenogorsk instrument plant

Card 1/2

ACCESSION NR: AP4011727

has begun producing the above components and control devices. Previous types of hydraulic jet-type regulators are considered unsatisfactory. New control systems, such as the GRK-1 hydraulic regulator, developed by the Institute of Automation and Telemechanics, AN SSSR, are based on unitized components. Sluggishness in introducing new components and "opposition to the introduction" are noted. Orig. art. has: no figure, no formula, and no table.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 10Feb64

ENCL: 00

SUB CODE: CG, IE

NO REF SOV: 000

OTHER: 000

Card 2/2

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220016-2

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220016-2"

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220016-2

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220016-2"

L-07885-67 ENT(d)/ENT(m)/ENP(k)/ENP(h)/ENP(l)/ENP(v) DJ/GD
ACC NR: AT6021730 (A) SOURCE CODE: UR/0000/66/000/000/0001/0088

AUTHOR: Dvoretzkiy, V. M.; Molchanov, G. G.; Temnyy, V. P.; Titov, S. M. 66
E+1

ORG: none

TITLE: System of elements for automatic hydraulic control 14

SOURCE: AN SSSR. Institut avtomatiki i telemekhaniki. Pnevmoavtomatika (Pneumatic automation). Moscow, Izd-vo Nauka, 1966, 81-80

TOPIC TAGS: automatic control system, hydraulic device, hydraulic engineering, hydraulic equipment, hydraulic logic device, hydraulic pressure amplifier, hydraulic resistance, hydraulics

ABSTRACT: Modules comprising a hydraulic control system are described. The operational amplifier consists of a resistance-membrane summation amplifier and a power amplifier. The operational amplifier, shown in figure 1, operates as follows: The elastic membranes 2 and 3 in the body of the summation amplifier 1 are connected by rod 4. Supply pressure P_g enters through choke (resistance) 8 into first amplification stage I, and simultaneously through channel 16 into pressure nozzle 12 of second amplification stage II. The input pressure is fed through chokes 5 into amplifier I, causing an average pressure of the inputs to be generated in the membrane chamber. The pressure difference forces the membrane to move flap 6 with respect to nozzle 7. The size

Card 1/3

L 07885-67
ACC NR: AT6021730

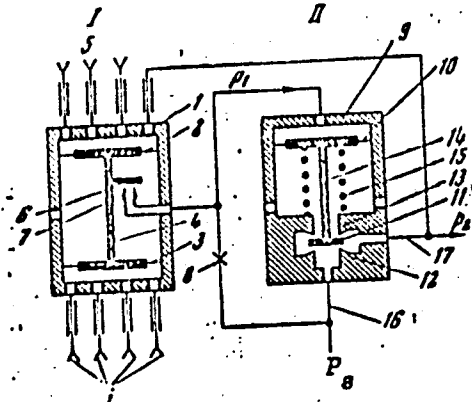


Fig. 1.

of the valve opening establishes a certain value of pressure within the middle chamber of amplifier I. This pressure serves as input P_1 to second stage II. The displacement of the membrane 10 is transferred to valve gate 11 through rod 14. The membrane is preloaded by spring 15. Valve chamber 12 and 13 is connected to output channel 17 and valve 13 leads to the pressure sink. The output pressure is determined by the position of valve gate 11. The hydraulic differentiator is constructed using two operational amplifiers, an inertial element, and chokes (resistances). The first operational amplifier with the inertial element works as a repeater of the lagging signal and is connected to one of the chambers of the second amplifier which operates as a summation unit. The in-

Cont. 2/3

L 07885-67
ACC NR: AT6021730

put pressure is fed into the choke of the inertial element; the pressure difference across this choke serves as the input to the second amplifier. The transfer function of the differentiator is

$$W(p) = \frac{kT_p}{T_p + 1}$$

The hydraulic integrator is very similar to the differentiator except that the inertial element and the corresponding choke are contained in the feedback loop. The hydraulic capacitor is a single outlet chamber which can have either a flexible membrane or a spring-loaded bellows such that the internal volume changes with respect to the input pressure. The hydraulic chokes can either be of the laminar or turbulent flow type. The former is usually in the form of a tube with a small bore. An electro-hydraulic converter was designed for the performance analysis of the hydraulic modules. It is based on displacement measurement of a membrane by means of a linear differential transformer. The bandwidth of this instrument is 0.1 to 100 cps. Each of the described modules is shown by a block diagram and fairly extensive performance data are included. Orig. art. has: 10 figures.

SUB CODE: 13,14/

SUBM DATE: 03Feb66/

ORIG REF: 005

Card 3/3 *gd*

3.2430

S/049/62/000/007/001/001
D207/D304

AUTHORS:

Pletnev, V.D. and Temnyy, V.V.

TITLE:

Interaction of a solar corpuscular stream with the external geomagnetic field in the first stage of a magnetic storm

PERIODICAL:

Akademiya nauk SSSR. Izvestiya. Seriya geofizicheskaya, no. 7, 1962, 978 - 980

TEXT:

A mathematical dissertation on the interaction of particles in a solar stream with the earth's magnetic field. It is assumed that during the first 1 1/2 hours of a magnetic storm, the solar stream compresses the geomagnetic field from 10 a to 4 a, where a is the earth's radius, until the magnetic-field energy is equal to the energy density of the stream particles. It is shown that solar protons in front of the stream are accelerated and enter the atmosphere at about 9.5 a having acquired energies of several million electron-volts. Similarly, solar electrons increase their energy from

Card 1/2

✓B

X

Interaction of a solar corpuscular ... S/049/62/000/007/001/001
D207/D308

the initial 2.5 eV (corresponding to a velocity of 1000 km/sec) to
2 keV at 9.5 a where they enter the atmosphere.

ASSOCIATION: . Institut fiziki atmosfery, Akademiya nauk SSSR
(Institute of Physics of the Atmosphere, Academy
of Sciences, USSR)

. SUBMITTED: February 3, 1962

✓
B

Card 2/2

TEMNYI, V.V.

Puzzle of the radiation belts of the earth. Priroda 51 no.7:116-
118 J1 '62. (MIRA 15:9)

1. Institut fiziki atmosfery AN SSSR.
(Van Allen radiation belts)

TEMNYY, V.V.

High-Energy Corpuscular Radiation

Report to be submitted for the 4th International Space Science Symposium
(COSPAR) Warsaw 2-12 June 63

GAL'PERIN, Yu.I.; KRASOVSKIY, V.I.; DZHORDZHIO, N.V.; MULYARCHIK, T.M.;
BOLYUNOVA, A.D.; TEMNYI, V.V.; MAROV, M.Ya.

Studying the upper atmosphere with the aid of the satellites
"Kosmos-3" and "Kosmos-5." Koam. issl. 1 no.1:126-146
Jl-Ag '63. (MIRA 17:4)

L 18947-63 EWT(1)/EWT(m)/FCC(w)/FS(v)-2/BDS/EEC-2/ES(v) AFFTC/ASD/
AFMDC/ESD-3/PPG Pe-4/Pi-4/Po-4/Pq-4 TT/GW

ACCESSION NR: AP3007342

S/0293/63/001/001/0139/0143

AUTHOR: Temny*y, V. V.

86
84

TITLE: Study of the upper atmosphere by means of Cosmos 3 and Cosmos 5 satellites. 3. High-energy particles

SOURCE: Kosmicheskiye issledovaniya, v. 1, no. 1, 1963, 139-143

TOPIC TAGS: particle, ionospheric particle, charged particle, high energy particle, high energy proton, proton, counter, particle counter, geiger counter, satellite, Cosmos 3, Cosmos 5

ABSTRACT: The third of four articles on results of recordings of geoactive particles in the atmosphere by Cosmos 3 and Cosmos 5 describes the high-energy particles registered by geiger counters. A type STS-5 halogen-filled counter was used which had 3.4 g/cm² of lead shielding and was further shielded by the satellite's aluminum skin, so that electrons below 0.4 Mev and protons below 50 Mev were effectively eliminated. A laboratory calibration of counter effectiveness was made which enabled particle flux density

Card 1/3

L 18947-63

ACCESSION NR: AP3007342

to be deduced from the count rate, providing the approximate energy level of the particles was known. Counter response was somewhat influenced by spurious bremsstrahlung caused by particles penetrating the vehicle skin and striking the apparatus within. On the basis of the geiger counts two regions of high-energy charged particles were found: 1) The first was a region near the earth where the count varied from 1.5/sec at the geomagnetic equator to 15—20/sec at latitudes 60° . These counts are too high to result from primary cosmic rays alone, but may be due to secondary particle showers caused by cosmic ray impacts. Also, no systematic change in count rate occurred as a function of vehicle motion along geomagnetic force lines; thus these particles were evidently not trapped in the field. 2) The second region was higher (500—1000 km) with a sharply defined lower boundary, lying between latitudes 50° N and 50° S; count rates here varied from 25 to 500/sec. These count rates were modulated by satellite rotation and also varied systematically along magnetic force lines, showing that the particles must be trapped in the geomagnetic field. After comparing these count rates to simultaneous readings

Card 2/3

L 18947-63

ACCESSION NR: AP3007342

2

of other type counters on board it was concluded that the particles in question were high-energy protons. The lower boundary of this capture region is below 500 km in the 15—20° latitudes and at higher latitudes tends to conform to equipotential magnetic force lines. Plots are given which locate the points of high-energy particle count with respect to magnetic field intensity and geomagnetic latitude. "In conclusion I express thanks to V. I. Krasovskiy for guidance and to Yu. I. Gal'perin for his most direct participation." Orig. art. has: 3 figures.

ASSOCIATION: none

SUBMITTED: 09May63

DATE ACQ: 21Oct63

ENCL: 00

SUB CODE: GE, AS

NO REF SOV: 003

OTHER: 004

Card 3/3

L 11112-83

SWT(1)/FCC(W)/PS(V)/RDM/ES(V)---AL*/AFFTC/AFMBC EDC---
Pe-4/Pg-4/Pi-4/P1-4/P2-4/P3-4---TT/GW

ACCESSION NR: AP3000792

S/0203/65/003/003/0401/0407

95
94

AUTHOR: Krasovskiy, V. I.; Gal'perin, Yu. I.; Temnyky, V. V.; Mulyarchik, T. M.; Dzhordzhio, M. V.; Marov, M. Ya.; Bolyunova, A. D.; Vaisberg, O. L.; Potanov, B. P.; Bragin, M. L.

TITLE: Some characteristics of geoactive particles

SOURCE: Geomagnetizm i aeronomiya, v. 3, no. 3, 1963, 401-407

TOPIC TAGS: geoactivity, Cosmos-3, Cosmos-5, satellite, particle counter, ionospheric particles, Kosmos-3, Kosmos-5

ABSTRACT: Three types of charged-particle sensors used on the Cosmos-3 and Cosmos-5 flights are described and some recorded results are discussed. One type was an aluminum tube which housed a fluorescent screen whose photoemission from particle impact was recorded by a photomultiplier. The screen was faced with aluminum foil of 0.4 to 1.1 mg/cm² thickness to prevent passage of low-energy particles. Grids placed at the tube entrance included an accelerating grid for applied stepped voltages of up to 11 kv and a bias grid at -40 v to prevent impact of thermal electrons on the foil. The fluorescent screen was made thin (1.4 mg/cm²) so as not to respond to x-ray radiation. Each such

Card 1/32

L 11112-63

ACCESSION NR: AP3000792

0

indicator subtended about $1/12$ steradian and had its axis normal to the satellite rotational axis; each satellite had several indicators. A second tubular device, acting as a trap for high-speed protons and electrons, was similar in construction but had an annular collecting electrode placed in a permanent-magnet field rather than a screen. The bias grid in this case eliminated electrons of less than 5 kev. Angular coverage of the trap counter was about 1 steradian. The third collector used was a standard Geiger counter, type STS-5, which was inside the satellite skin and had a 3-mm lead shield to minimize x-ray effects. This counter responded only to electrons above 0.4 Mev and protons above 50 Mev, but is described as too primitive to distinguish their relative contributions. Results from the three types of recorders are discussed as functions of satellite altitude, latitude, and day/night exposure. Three general energy groupings appear to exist: 1) electrons of 10^2 – 10^4 ev at maximum flux density of 10^9 el/cm²/sec/ster, observed at levels above 300 km over the USSR (30 – 35° N); 2) electrons of about 100 kev, with a maximum density of 2×10^7 el/cm²/sec/ster, noted mainly in southern latitudes at altitudes of 600–700 km over the South Atlantic; and 3) the very high energy protons and electrons registered by the Geiger counter at peaks of 100 pulses/cm²/sec/ster (not associated with any particular geographical region).
Orig. art. has: 7 figures.

Card 2/32

Inst. of Physics of the Automobile

L 10799-63 EWT(1)/FCC(w)/FS(v)/BDS/ES(v)--AEDC/AFFTC/ASD/AFMDC/ESD-3/
APCC--Pc-4/Pg-4/Pi-4/P1-4/Po-4/Pq-4--TT/CW

95
74

3/0203/63/003/003/0403/0416

ACCESSION NR: AP3000793

AUTHOR: Krasovskiy, V. I.; Gal'perin, Yu. I.; Temyky, V. V.; Mulyarchik, T.M.;
Dzhordzhio, N. V.; Marov, M. Ya.; Bolyunova, A. D.

TITLE: Some new results of geophysical studies made by Kosmos-3¹² and Kosmos-5¹² satellites

SOURCE: Geomagnetizm i aeronomiya, v. 3, no. 3, 1963, 403-416

TOPIC TAGS: Kosmos-3, Kosmos-5, radiation belt, particle counter, upper atmosphere radiation, radiation, upper atmosphere Kosmos-3, Kosmos-5

ABSTRACT: Concentrations and intensities of charged particles¹² as measured by the Kosmos-3 and Kosmos-5 satellites are analyzed. The satellites used combinations of three types of recorders¹²: 1) a collector tube with fluorescent screen sensor and photomultiplier, 2) an ion trap with a ring electrode collector located in a permanent magnetic field, and 3) a Geiger counter with a 3-mm lead shield, which registered only electrons above 0.4 Mev and protons above 50 Mev. Particles recorded by these sensors fell into three energy

Card1/3

L 10799-63

ACCESSION NR: AP3000793

groups: 1) high-energy protons and electrons recorded by the Geiger counter, 2) electrons of about 100 Kev; and 3) electrons of the order of 1--10 Kev. No observable correlation appears to exist among these groups. Isoline contours in earth coordinates are given for groups 1 and 2 showing their energy distribution over the South Atlantic region, where intensity was maximum. These data are in the 650-km altitude region and show that the coordinates of maximum intensity areas shifted with succeeding passes of the satellite. Some possible explanations for this shift are suggested, which are postulated on the lifespan of the particles relative to satellite orbit time. In equatorial latitudes at a 200--400-km altitude the Geiger count did not average over 1.8 pulses/sec. In contrast, the Geiger count recorded by Kosmos-5 in the vicinity of apogee (1600 km) exceeded 1500 pulses/sec and showed a strong periodicity with satellite rotation, indicating that these high-energy particles are trapped in the geomagnetic field and moving normal to its lines of force. Group 3 electrons, which were sporadic in appearance and located mainly in the polar latitudes, varied in intensity proportionally with altitude. The retarding of the satellites due to particle friction at the perigees (200 km for Kosmos-5) was noted to be less than for the 1958 sputniks, which indicates less

Card 2/3

L 10799-63

ACCESSION NR: AP3000793

geomagnetic activity during the present observations (April-May 1962).
Orig. art. has: 10 figures and 1 table.

ASSOCIATION: Institut fiziki atmosfery AN SSSR (Institute of the Physics of
the Atmosphere, AN SSSR)

SUBMITTED: 31Jan63

DATE ACQ: 21Jun63

ENCL: 00

SUB CODE: SP, AS

NO REF SOV: 010

OTHER: 010

cs/uk

Card 3/3

TEMNYI, V. V.; GALPERIN, Yu. I.;

"Atmospheric scale height in the 200-400 km range according to radiation belt data."(USSR)

Report submitted for the COSPAR Fifth International Space Science Symposium, Florence, Italy, 8-20 May 1964.

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220016-2

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220016-2"

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220016-2

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220016-2"

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220016-2

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220016-2"

L 1276-66 EWA(h)/EWT(1)/FS(v)-3/FCC/EWA(d)/FSS-2 TT/GM/GS

ACCESSION NR: AT5023585

UR/0000/65/000/000/0209/0213

AUTHOR: Temnyy, V. V.

TITLE: Spatial distribution of various groups of trapped particles according to data from the "Kosmos-3" and "Kosmos-5" satellites

SOURCE: Vsesoyuznaya konferentsiya po fizike kosmicheskogo prostranstva. Moscow, 1965. Issledovaniya kosmicheskogo prostranstva (Space research); trudy konferentsii. Moscow, Izd-vo Nauka, 1965, 209-213

TOPIC TAGS: electron distribution, particle distribution, artificial earth satellite, satellite data analysis

ABSTRACT: The author uses data obtained by the "Kosmos-3" and "Kosmos-5" satellites to determine the distribution of protons with $E > 40$ Mev and electrons trapped by the geomagnetic field before the American high-altitude explosion of 9 July 1963. Graphs are given for the distribution of high-energy protons in McIlwain's B, L coordinates. Envelopes are plotted for studying the distribution of electron streams according to maximum current signals modulated by rotation of the satellite about the axis perpendicular to the axes of the indicator. These envelopes define a

Card 1/3

L 1276-66

ACCESSION NR: AT5023565

continuous variation in the fluxes of captured electrons along the orbit of the satellite recorded in a direction perpendicular to the field line. An analysis of the electron spectrum shows that these signals are basically due to trapped electrons with $E > 40$ kev. An attempt to graph the distribution of equal electron intensities in B, L coordinates showed a considerable scatter in experimental data. The nature of this scatter was determined by plotting the omnidirectional intensity as a function of B for seven fixed L from 1.2 to 2.0. If h_{\min} above the surface of the earth is substituted for B , then the first approximation for intensities less than $5 \cdot 10^7$ particles $\cdot \text{cm}^{-2} \cdot \text{sec}^{-1}$ gives functions $I(h_{\min})$ which are nearly identical for all L , i. e. it may be assumed that the distribution of intensities depends only on h_{\min} and longitude λ . Experimental curves are given for h_{\min} as a function of $\Delta\lambda$ (distance in degrees along the drift trajectory from the point where the given magnetic L shell sinks most deeply into the atmosphere) for various stream intensities. A comparison of these curves is used as a basis for constructing a model for the distribution of trapped electrons in B, L coordinates. This model shows a maximum flux of captured electrons close to $L = 1.6$. "In conclusion, I thank V. N. Smirnev for assistance in analyzing the results." Orig. art. has: 5 figures. [14]

ASSOCIATION: none

Card 2/3

L 1276-66
ACCESSION NR: AT5023585

SUBMITTED: 02Sep65

ENCL: 00

SUB CODE: ES, ⁰MP

NO REF SOV: 007

OTHER: 004

ATD PRESS: 4/02

PC
Card 3/3

L 3107-66 FSS-2/EWT(1)/FS(v)-3/FCC/EWA(d)/EWA(h) TI/GS/GW
ACCESSION NR: AT5023611 UR/0000/65/000/000/0406/0417

AUTHOR: Bolyunova, A. D.; Vaysberg, O. L.; Gal'perin, Yu. I.; Potapov, B. P.;
Temnyy, V. V.; Shuyskaya, F. K. 77
67
21

TITLE: Preliminary results of particle studies using the "Elektron-1" satellite

SOURCE: Vsesoyuznaya konferentsiya po fizike kosmicheskogo prostranstva. Moscow, 1965. Issledovaniya kosmicheskogo prostranstva (Space research); trudy konferentsii. Moscow, Izd-vo Nauka, 1965, 406-417

TOPIC TAGS: particle physics, artificial earth satellite, satellite data analysis, electron, proton

ABSTRACT: The authors analyze data from the "Elektron-1" to determine the distribution of radiation in the geomagnetic trap along the orbit of the satellite in January-March 1964. At lower latitudes ($L < 2$) close to the equator, the dominating particle flux is from electrons of natural origin with energies of 20-200 kev and an intensity of up to $2 \cdot 10^9$ particles \cdot cm $^{-2}$ \cdot sec $^{-1}$, and from electrons artificially injected by the high-altitude explosion of 9 July 1962 with energies of several Mev and a flux of up to $2 \cdot 10^8$ particles \cdot cm $^{-2}$ \cdot sec $^{-1}$. There are also trapped protons in

Card 1/2

L 3107-66

18

ACCESSION NR: AT5023611

this same region with energies of tens and hundreds of Mev and an intensity of up to $\sim 5 \cdot 10^4$ particles $\cdot \text{cm}^{-2} \cdot \text{sec}^{-1}$ ($E > 50$ Mev). At middle latitudes ($2 < L < 4$) there is a sharp increase in the flux of soft protons with energies of a few hundred kev to intensities of no less than $\sim 10^8$ particles $\cdot \text{cm}^{-2} \cdot \text{sec}^{-1}$ at latitudes of $30-50^\circ$ and apparently to no less than $\sim 3 \cdot 10^8$ close to the plane of the equator at $L \sim 3$. Their spectrum is softer at higher latitudes. Both protons and electrons are observed at higher latitudes, the low energy electron component ($E > 20$ kev) being extremely variable, especially during increased geomagnetic activity. The boundary of the capture zone in the geomagnetic field during magnetic calm matches the outlines of the "momentary" polar aurora zone which reflects the diurnal asymmetry of the magnetosphere. "In conclusion, we are sincerely grateful to V. I. Krasovskiy, T. M. Mulyarchik, N. V. Dzhordzhio, M. L. Bragin, G. N. Zlotin, I. N. Kiknadze, I. D. Dmitriyeva, T. N. Zaglyadimova, A. K. Nazarova and G. A. Bordovskiy for great assistance in the work and for useful discussions." Orig. art. has: 8 figures and 1 table. [14]

ASSOCIATION: none

SUBMITTED: 02Sep65

NO REF SOV: 009
Card 2/2

ENCL: 00

OTHER: 008

SUB CODE: ES, NP

ATD PRESS: 4105

TEMOFEYEVA, A.N.; LIPSKAYA, L.A.

Barbamyl-tofranil test in the evaluation of depressive states.
Zhur. nevr. i psikh. 63 no.10:1549-1553 '63, (MIRA 17:5)

1. Laboratoriya patologii vysshey nervnoy deyatel'nosti cheloveka
(zav. - prof. V.I. Butorin) Instituta fiziologii imeni Pavlova AN
SSSR, Leningrad.

TEMOSHCHUK, A.

Constructing sliding forms. Strcitel' no.7:18 J1 '57. (MLRA 10:9)
(Concrete construction--Formwork)

SOPOVA, A.S.; TEMP, A.A.

Reaction of acetoacetic ester with β -nitrostyrenes. Zhur.ob.khim.
31 no.5:1532-1534 My '61. (MIRA 14:5)

1. Leningradskiy pedagogicheskiy institut imeni A.I.Gertsena.
(Acetoacetic acid) (Styrene)

PROCEEDS AND PROPERTIES OF...

CA 10

The mechanism of reactions between the chlorides of sulfur and ethyl alcohol. I. N. Parfen'ev and A. N. Temp. *Trudy L'vovskogo Gosudarst. Univ., Khim. i Fiz. Khim. 15, 13 (1959).*—Owing to the different properties of S chlorides the reaction of EtOH with them is a complex process which proceeds simultaneously in different directions. On the basis of the performed expts. and observations it was detd. that the reaction between SCl₂ and EtOH is represented by 2SCl₂ + 2EtOH → 2S + 2EtCl + 2HCl + SO₂. The formation of the observed OS(OEt)₂ takes place from SCl₂, which is either present or is formed from heating SCl₂, according to (1) SCl₂ + EtOH → SOCl₂ + EtCl + HCl, and (2) SOCl₂ + 2EtOH → OS(OEt)₂ + 2HCl. At low temps. this reaction does not proceed to completion, but stops at the intermediate stage according to SOCl₂ + EtOH → HCl + EtOSCl. The effect of high temps. is manifested in facilitating the completion of the reaction. This increases the yield of Et₂SO₂. Four references. W. R. Henn

COMMON ELEMENTS

OPEN

MATERIALS INDEX

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

SEARCHED INDEXED

RECEIVED

APR 1960

1ST AND 2ND DEGREE PROCESSES AND PROPERTIES WORK

7

CA

The rapid determination of nitrogen by a modified Kjeldahl method. A. N. Temp and G. A. Aleksandrov. *Trudy Uzbekskogo Gosudarst. Univ., Sbornik Rabot Khim.* 15, 4-5 (1939).—The proposed directions are similar to those commonly used except that it is recommended to take away the fumes developed by the digestion process by means of a water pump. W. R. H.

COMMON ELEMENTS

COMMON VARIETIES

ASB-35A METALLURGICAL LITERATURE CLASSIFICATION

FROM 034179

RELEASING OFFICE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

PROCESSES AND PROPERTIES

10

CA

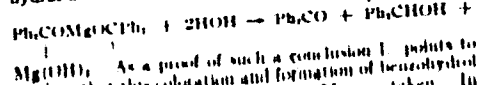
The "metahalogenyl" hypothesis and details of the Würtz and Fittig reaction. A. N. Temp. *Trends Khim. iko Gosudarst. Univ., Sbornik Rabot Khim.* 15, 10-25 (1959). - The expts. performed confirm the "metahalogenyl" hypothesis by means of which it is possible to understand the processes taking place during the Würtz and Fittig reaction and to explain the mechanism of the formation of free radicals and the anomalous phenomena of the reaction. In the investigations the effects of Na on a mixt. of Ph₂CO with (CH₃Br)₂ and of Na on a mixt. of (CH₃Br)₂ with PhBr and PhCl were investigated according to the reactions (CH₃Br)₂ + 2Ph₂CO + 4Na → Ph₂C(ONa)-CH₂CH₂C(ONa)Ph + 2NaBr, PhBr + (CH₃Br)₂ + 2Na → PhBr + C₂H₆ + 2NaBr, and PhCl + (CH₃Br)₂ + 2Na → PhCl + C₂H₆ + 2NaBr, resp. The expts. showed that Ph₂CO, PhBr and PhCl can be used as catalysts for removing the halide atoms by means of Na from α,β-dihalide derivs. There is no definite explanation of the nature of the blue substances which are always formed during the Würtz-Fittig syntheses. The "metahalogenyl" hypothesis agrees with the view that the blue substances are complex org. compds. with metallic Na and it is possible that the blue substances are the initial products of the addn. of Na to the halide derivs. No special investigations of these substances were carried out. Five references.

W. R. Henn

METALLURGICAL LITERATURE CLASSIFICATION

C. G.
The effect of isopropylmagnesium chloride on benzophenone (A preliminary report) A. N. Lemp and R. Kh. Gibalevich. *Izvestiya Leningradskogo Universiteta, Khim. Seriya*, 1963, 15, 95-7 (1939).

—T. and G. reported the expts. of Lagerev (C. A. 31, 43089) in order to verify his conclusions that the Grignard reaction between iso-PrMgCl and benzophenone is accompanied by the formation of an intensive red color and that he obtained considerable amts. of benzophenone and benzohydrol. He explains this reduction of carbonyl compds. into primary and secondary alcs. by the fact that benzophenone and Mg diketyls (red colored compds. which are unstable and accumulate in the reaction mixt.) decompose from the action of water into benzophenone and benzohydrol according to $2Ph_2CO + Mg \rightarrow Ph_2COMgOCPh_2$



As a proof of such a conclusion I. points to the fact that this coloration and formation of benzohydrol was observed only when an excess of Mg was taken. In their expts. T. and G. found that the visible course of the reaction between iso-PrMgCl and benzophenone is identical if a small excess of iso-PrCl is present which is necessary for the complete dissolving of Mg. The only differ-

ence observed was the fact that the red colored complex disappeared immediately and the reaction mixt. acquired the usual pinkish color. After the decomposition and corresponding treatment an oil was obtained from which benzophenone and small amts. of benzophenone were hydrolyzed (as anomalous products). The remaining part obtained (as anomalous liquid mixt. which boils between of the oil is a complex liquid mixt. which boils between wide temp. limits (162-87° at 1.4 mm) and which could not be sep'd. from its components. In the 2nd expt. a double amt. of iso-PrCl was taken in order to det. its effect on the course of the reaction. The amts. of benzophenone and benzohydrol ester increased in proportion. T. and G. conclude that the reducing processes take place without an excess of Mg and that the reaction does not go to completion under the influence of the increase of the halide salts of Mg, but leads to the formation of benzohydrol ester. The performed expts. are not completed and it is contemplated to det. the mechanism of these complex transformations. The conclusions of I. that the reduction of carbonyl compds. is det'd. only by the nature of the carbonyl compds. and does not depend on the phys. chem. conditions of the expts. are erroneous. I. references.

W. R. Hunt

TEMP, AN

ca

9

PROCESSING AND PROPERTY DATA

Kaolinites and clays from the vicinity of Samarkand as catalysts for the dehydration of alcohols. II. Dehydration of isopropyl, isobutyl and isocamyl alcohols. A. N. Temp, Yu. M. Shvabe and K. A. Aganova. *Izvestiya Akad. Nauk SSSR, Ser. Khim.* 1974(1975) 197-4(1975).—Iso-PrOH and iso-BuOH are dehydrated nearly completely with the Agalyk kaolinites. The method can be used for the production of propene and butylene in large amts. Expts. with iso-AmOH produced less satisfactory results and the method is not suitable for the production of large amts. of amylene. The expts. consisted of passing the vapors of the corresponding alcohols through a tube filled with pieces of the catalyst and heated to a definite temp. In the expts. with iso-AmOH the amylenes were produced in the pure state by distn. A liquid b. 20-40°, consisting of a mixt. of isomylene, trimethylethylene and ethylpropylene, was obtained. The unsatd. nature of this mixt. was detd. qualitatively by decolorizing Br water and alk. KMnO₄ soln. The yields of the products of the dehydration of iso-PrOH with Agalyk kaolinites at 440, 451, 450, 460, 480, 485, 500 and 540° were, resp.: 51.47, 77.41, 81.00, 86.17, 89.42, 77.10, 81.06 and 79.58%. The yields of the products of the dehydration of iso-BuOH at 440, 480, 515, 553, 564 and 577° were, resp.: 49.07, 84.06, 94.94, 96.72, 78.61 and 79.40%. The yields of the products of the dehydration of iso-AmOH at 440, 450(40), 500, 550 and 540-501° were, resp.: 10.70, 14.00, 31.06, 40.00 and 40.00%.

W. R. Henn

ASAC-31-A METALLOGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

TEMP, A.N. (g. Gomel')

~~_____~~
Simplified soldering burner for glass blowing work. Khim. v shkole no.3:
61-62 My-Je '53. (MLRA 6:7)
(Burnes)

TEMP, A.N. (g. Gomel')

Improved apparatus for the dry distillation of wood. Khim.v shkole
9 no.3:54-55 My-Je '54. (MLRA 7:6)
(Distillation, Destructive)

TEMP, A.N. (g. Gomel')

Homemade high-temperature kerosene burner. Khim.v shkole 10 no.3:
55-57 My-Je '56. (MLRA 9:8)

(Burners)

TEMP, A.N.: TEMP, Ye.V. (Gomel').

Decomposition of lime in chemistry classes. Khim.v shkole 11
no.6:53 N-D '56. (MLRA 9:53)
(Lime)

TEMP. A.N., (g.Gomel'); TEMP. Uo.V., (g.Gomel')

New apparatus for studying cracking of petroleum products in chemistry
classes. Khim. v shkole 12 no.2:46-48 Mr-Apr '57. (MLRA 10:3)
(Cracking process

TEMP, A.N.; TEMP, Ye.V. (Gomel').

Decomposition of lime in chemistry classes. Khim.v shkole 11
no.6:53 N-D '56. (MLRA 9:53)

(Lime)

TEMP, YE

TEMP. A.N., (g.Gomel'); TEMP. ~~Ye.V.~~, (g.Gomel')

New apparatus for studying cracking of petroleum products in chemistry classes. Khim. v shkole 12 no.2:46-48 Mr-Apr '57. (MIRA 10:3)
(Cracking process

TEMPCZY, M.; OBIEGLY, S.

For a correct determination of the efficiency of bulldozers. p. 58. (Przegląd
Budowlany, Vol. 20, No. 2, Feb 1957, Warsaw, Poland)

SO: Monthly List of East European Accessions (EEAL) IC, Vol. 6, No. 8, Aug 1957. Uncl.

TEMPCZYK, H.

For improvement in the transportation of articles of freight larger than freight cars. p. 126. (PRZEGLAD KOLEJOWY, Vol. 6, No. 4, Apr. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (SEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

TEMPEL, H.

Fuel consumption and efficiency of steam shovels. p. 174. (PRZEGLAD TECHNICZNY, Vol. 20, No. 6, June 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (FEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

TEMPCZYK, M.

For a reasonable management of lubricants used in heavy building machinery, p. 41.
(PRZEGLAD BUDOWLANY, Warszawa, Vol. 27, no. 2, Feb. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jun. 1955,
Uncl.

TEMPCZYK, M.

Utilization of liquid fuel in the excavating and pushing machines. P. 27
PRZEGLAD BUDOWLANY. (Naczelna Organizacja Techniczna i Polski Związek
Inżynierów i Techników Budownictwa) Warszawa.
Vol. 28, no. 1, Jan. 1956

SOURCE: EEAL LC Vol. 5, no. 7, July 1956

TEMPCZYK, Marian

Typization and industrialization of the apartment building
industry. Przegl techn no.48:4 30 N '60.

TEMPCZYK, Marian

Not 80 thousand but 86.5 thousand dwelling rooms to be built
during the period 1961-1965. Przegł techn no.5114 21 D '60.

TEMPCZYK, M.

Building machiners. p.5

PRZEGLAD TECHNICZNY. (Naczelna Organizacja Techniczna) Warszawa, Poland
Vol.80, no.41, Oct. 1959

Monthly list of East European Accessions (EEAI) LC, Vol.9, no.1, Jan. 1960

Uncl.

TEMPCZYK, Marian (Warszawa)

Trade Union of Construction workers and the Building Materials Industry, and the Polish Union of Construction Engineers and Technicians, the problem of their cooperation. Przegl. budowl. i bud. mieszk. 33 no.5:269-274 My'61

TEMPCZYK, Marian (Warszawa)

Development, organization, and technical progress of
apartment building in the Czechoslovak Socialist Republic.
Przegl budovi i bud mieszk 33 no. 10: 594-602 0 '61.

TEMPCZYK, Marian

Movement of employee inventiveness on the basis of typical cases
in the construction industry. Przegl techn no.35:5 2 S '62.

TEMPCZYK, Marian (Warszawa)

Realization prospects of the plan of transportation and leading works during the years 1961-1965; machinery and equipment for mechanization. Przegł budowl i bud mieszk 34 no.2:94-101 P '62.

STACHOWIAK, Kazimierz (Szczecin); TEMPCZYK, Marian (Warszawa)

The eleven-grade public school in Szczecin-Klucz; a building placed on a spot of very difficult geological conditions. Przegł budowl i bud mieszk 34, no.8:467-473 Ag '62.

TEMPIA, V. [Tempea, V.]

Diseases of interest to the oculist and otorhinolaryngologist.
Vest.otorin. 22 no.2:36-46 Mr.-Ap '60. (MIRA 13:12)

1. Iz otdeleniya bolezney ukha, gorla i nosa klinicheskoy bol'nitsy
imeni I.K.Frimu (Bukharest).
(OTORHINOLARYNGOLOGY)
(OPHTHALMOLOGY)

FLORIAN, Petru, prof. (Dej); MARUSTERU, St., (Baia Mare); HERLING, C., student; PIRSAN, L.C., student (Bucuresti); IONESCU-TIU, C.; COSTACHESCU, C.V.; LAMBA, Stelian (Constanta); LIVIU, Petre (Pucioasa); STRATESCU, Ion, student; BRINZANESCU, V., elev (Constanta); KLIM, Bratu, student (Bucuresti); TEMPEANU, C. (Hunedorara); CALINESCU, Aurelian (Brasov); MUNTEANU, Valentin (Cluj); OPREA, Miron (Ploiesti); MIHAILEANU, N.; TIGANOIU, Al., inginer; Buicliu, Gh.; POPA, Eugen I. (Iasi)

Proposed problems. Gaz mat B 14 no.8:481-485 Ag '63.

1. Institutul Politehnic Bucuresti (for Herling).

TEMPER, F.G. (L'vov)

Determination of maximal production of gas wells. Insh.sbor. 15:191-194
'53. (MLRA 7:1)
(Gas, Natural)

"APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220016-2

APPROVED FOR RELEASE: 07/16/2001

CIA-RDP86-00513R001755220016-2"

TEMPEL, F.G.

Method for calculating storage capacity of gas mains. Gas.prom.
no.3:29-32 Hr '56. (MLRA 10:1)
(Gas pipes) (Gas--Storage)

TEMPER, F.G.

TEMPER, F.G.

Modeling the process of gas accumulation in a long pipeline. Gaz.
prom. no.7:32-36 J1 '56. (MIRA 11:1)
(Gas, Natural--Pipelines--Models)
(Gas flow)

TEMPEL', F.G.

Method for calculating bottom water drive and pressure changes in a
dome gas pool during exploitation. Gaz.prom. no.4:5-7 '57.

(MLRA 10:5)

(Gas, Natural)

TELEPHON, F.G., ^{Tech} ~~Cond Engin Sci~~ —(disc) ^{On} "The problem of a non-
stationary ^{mode} ~~mode~~ of gas transmission." Moscow, 1958. 19 pp.
(All-Union ^{petroleum} ~~gas~~ ~~Sci~~ ~~and~~ ~~Res~~ ~~Inst~~ ~~VIII~~).
All-Union ~~Sci~~ ~~and~~ ~~Res~~ ~~Inst~~ of Natural Gases (VNIIGas).
150 copies.
(IL, 38-58, 106).

26

TEMPEL', F.G.; FILIPPOV, N.V.; KARPIY, V.N.; BOBAK, V.N.

Apparatus for odorizing gas under conditions of varying rate of
flow. Gaz. prom. no.3:51-53 Mr '58. (MIRA 11:3)
(Gas, Natural)

TEMPER', F.G.

Effect of the location of the connection of a loop system on the
storage capacity of the main gas pipeline. Gaz. prom. no. 5:45-47
My '58. (MIRA 11:7)

(Gas, Natural--Pipelines)

11(2) PAGES 1 BOOK EXPLORATION 809/7253

Veskovyuy namuch-issledovatel'skiy institut prirodnaya gazov
Bashkorta i obshchestvay gazovaya mestovnoy, transport gazov (Development
and Exploration of Gas Fields, Transportation of Gas) Moscow, Gostoyzhebnizdat,
1979, 373 p. (Series: 154; Trade, 779, 3/73) Kravata also inserted.
1,500 copies printed.

Sponsoring Agency: Glavnaaya upravleniye gazovoy promyshlennosti pri Sovete
Ministroy SSSR.
Eds.: Ye. N. Kluakly and V.M. Raaben; Eds. Ed.: N.P. Maryanov; Tech. Ed.:
A.S. Polozim.

PURPOSE: This collection of articles is intended for scientists, engineers,
and technicians associated with the gas industry.

COVERAGES: The articles discuss the development of gas fields, natural gas re-
covery, gas transportation, and the effect of gas concentration. Gas field operat-
ing conditions are analyzed for the commercial point of view. The author
discusses the application of specific geological conditions prevailing in the Soviet
Union to the application of gas extraction methods of the type used in the USA
and other countries. Individual articles discuss problems of the de-
velopment of gas fields with narrow oil containing fringes, the theory of gas
injection, the study of gas well performance, gas filtration dynamics, and the
study of gas condensates. A number of articles are devoted to the study of un-
stabilized gas flow in pipelines, and discuss theoretical problems connected
with the performance of gas ejectors and compressors. The authors also deal
with corrosion of the inner surface of gas pipelines. Conclusions drawn by
the authors are supported by mathematical calculations. No personalities are
mentioned. References accompany each article.

Podobnyy, I.Ye., and V.M. Raaben. On the Acoustical Determination of Gas Flow in Pipelines	201
Podobnyy, I.Ye., and V.M. Raaben. Some Calculations on Gas Pipelines With an Unstabilized Gas Flow	213
Podobnyy, I.Ye., and V.M. Raaben. Accurate Determination of the Gas Pipeline Throughput Capacity	220
Podobnyy, I.Ye., and V.M. Raaben. Effect of Connecting Rings on the Throughput Capacity of a Gas Pipeline	236
Podobnyy, I.Ye. On the Theory of Unstabilized Gas Stream Flowing Under High-Flow Pressure Through Long Horizontal Pipelines	244
Podobnyy, I.Ye. Steadiness of Stationary Operating Conditions of a Supersonic Gas Ejector	251
Podobnyy, I.Ye., and G.A. Zolov. Successive Operations of Gas Ejectors Under Stationary Supercritical Conditions	267
Podobnyy, I.Ye. Study of the Acoustic Supercharging of a Piston Compressor, Carried Out With the Aid of a Variable Volume Resonator	285
Podobnyy, I.Ye., E.S. Zakhvo, and Ye.P. Osharimbo. Study of the Intrastatic Corrosion of the Inner Surface of the Gas-Line Steel Pipes	304
Podobnyy, I.Ye., Ye.P. Osharimbo, and A.A. Ponomarev. Study of the Process of Oil Spray Used for the Anticorrosive Protection of the Inner Surface of Gas Pipelines	323
Podobnyy, I.Ye., and E.S. Zakhvo. Experience Gained in Mastering the Production of Oil Spray, and Its Utilization in a Horizontal Gas Distributing Network	338

338 (25)

TEMPEL', F.G.; KHODANOVICH, I.Ye.

Calculations for gas mains under nonstationary conditions of gas
flow; discussion. Gaz. prem. 4 no.2:49-54. F '59.
(MIRA 12:3)

(Gas pipes)

KHODANOVICH, I.,Ye.; TEMPEL', F.G.

Model analysis of nonstationary processes of gas flow in a main
pipeline. Gas.prom. 4 no.8:34-39 Ag '59. (MIRA 12:11)
(Gas, Natural--Pipelines) (Gas flow)

TEMPEL', F.G.; KHODANOVICH, I.Ye.

Self-similar drop liquid flow in pipelines. Trudy VNIIGAZ
no.8:50-58 '60. (MIRA 15:5)
(Pipelines--Hydrodynamics)

KHODANOVICH, I.Ye.; TEMPEL', F.G.

Approximate computation for high pressure circular system of gas
pipelines. Gaz. prom. 5 no. 12:39-42 D '60. (MIRA 14:1)
(Gas, Natural--Pipelines)

TEMPEL', F.G.

Exploitation of a gas pool with a constant number of wells. Trudy
(MIRA 15:2)
VNIIGAZ no.11:171-174 '61.
(Gas wells)

KHODANOVICH, I.Ye.; TEMPEL', F.G.

Method of calculating the accumulation capacity of a gas pipeline
taking into account the propagation rate of a pressure wave front.
Trudy VNIIGAZ no.13:50-56 '61. (MIRA 14:12)
(Gas, Natural--Pipelines)

16.3500

S/167/62/000/002/002/002
D237/D302

AUTHOR: Tempel', F.G.

TITLE: A method of solving a class of non-linear partial differential equations

PERIODICAL: Akademiya nauk UzSSR. Izvestiya. Seria tekhnicheskikh nauk, no. 2, 1962, 81 - 82

TEXT: The author proposes a method, called by him the method of characteristic indices, for solving the following class of non-linear partial differential equations:

$$\left. \begin{aligned} - \frac{\partial z^n}{\partial x} &= a^* \varphi^m \\ - \frac{\partial z}{\partial t} &= \beta^* \frac{\partial \varphi}{\partial x} \end{aligned} \right\} \quad (1)$$

where a^* and β^* , n , m are constants, and $m, n \geq 1$. Replacing some terms by their mean value integrals, and introducing a new variable and introducing necessary and sufficient conditions for the system

Card 1/2

JB

S/167/62/000/002/002/002
D237/D302

A method of solving a class of ...

to be reducible to the parabolic type system, the author succeeds in transforming (1) into

$$\left. \begin{aligned} - \frac{\partial \omega}{\partial y} &= K \lambda \\ - \frac{\partial \omega}{\partial t} &= N \frac{\partial \lambda}{\partial y} \end{aligned} \right\} \quad (8)$$

which can be solved by known methods. The author notes that when the time interval $(\tau_2 - \tau_1) \rightarrow 0$, the solution of (8) \rightarrow the solution of (1). Solutions of (8) compared with computed solutions of (1) deviate by not more than 5 %.

ASSOCIATION: Sredneaziatskiy filial VNIIG aza (Central Asia Branch of VNIIGaz)

SUBMITTED: December 15, 1961

JB

Card 2/2

S/167/62/000/006/002/003
D234/D308

24.4300

AUTHORS: Tempel', F.G., Abutaliyev, F.B., Bukhantseva, R.S.
and Kosolov, B.

TITLE: Some self-modeling problems of gas motion in a
pipeline

PERIODICAL: Akademiya nauk UzSSR. Izvestiya. Seriya tekhnicheskikh nauk, no. 6, 1962, 35-40

TEXT: The authors give self-modeling solutions of the equations of motion for a semi-infinite pipeline for the case of constant pressure and that of constant flow rate at the beginning of the line. The self-modeling transformation is

$$\eta = \sqrt[3]{\frac{2a}{\beta^2}} xt^{-2/3} \quad (5)$$

The solutions were obtained with the aid of a computer. Graphs and Card 1/2

Some self-modeling problems ...

S/167/62/000/006/002/003
D234/D308

numerical results are given for several values of P_N/P_0 . There are 3 figures.

ASSOCIATION: Institut matematiki AN UzSSR (Institute of Mathematics AS UzSSR)

SUBMITTED: June 21, 1961

✓B

Card 2/2

L 22021-66 EWT(1) IJP(c) GG

ACC NR: AP6005014

SOURCE CODE: UR/0208/66/006/001/0175/0178

AUTHOR: Tempel', F. G. (Tashkent)

ORG: none

TITLE: Method for solving certain quasilinear equations of ^{21,44,55} mathematical physics

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 6, no. 1, 1966, 175-178

TOPIC TAGS: parabolic differential equation, differential equation, approximation calculation, separation of variables, analogue computer, mathematic physics

ABSTRACT: The author treats

$$\begin{aligned}
 -\frac{\partial z^n}{\partial x} &= \varphi^n, \\
 \frac{\partial z}{\partial \tau} &= \frac{\partial \varphi}{\partial x}
 \end{aligned}
 \quad 0 \leq x \leq 1, 0 \leq \tau \leq T \quad (1)$$

using separation of variables on separate intervals, on each of which the problem is approximately reduced to the solution of a system of linear partial differential equations and a functional equation. He claims that this method has been found experimentally to yield correct results and that it is suitable for analogue machines. Orig. art. has: 6 formulas and 1 table.

Card 1/1 SUB CODE: 12/ SUBM DATE: 16Dec64/ ORIG REF: 003 UDC: 517.9:53

TEMPELHOF
TEMPELHOF, J.

Private and branch transportation in the building industry.

p. 276 (Motoryzacja) Vol. 12, No. 10, Oct. 1957, Warszawa, Poland

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

ROJEK, Karol; TEMPELHOF, Jerzy

Trends of ~~technological~~ and organizational progress in the
automotive transport of the construction industry. Przegl
techn no.43:4 26 0 '60.

ROJEK, K.; TEMPELHOF, J.

Mechanization of loading in the transportation of building materials. Przegl techn no.51:4 21 D '60.

TEMPELHOF, Jerzy (Warszawa)

Utilization of basic building machinery in enterprises of
the building administration in 1960. Przegl budowl i bud
mistrz 23 no. 38489-494. Ag 1961.

TEMPELHOF, Jerzy (Warszawa); MODRAKOWSKI, Aleksander (Warszawa)

Tasks and development of branch transportation in the construction industry. Przegl budowl i bud mieszk 34 no.7:384-388 J1 '62.

TEMPELHOF, Jerzy (Warszawa)

Linear programming in transportation. Przegł budowl i bud
miesz 34 no.7:399-401 J1 '62.

TEMPEL'MAN, A. A.

Transactions of the Sixth Conference (Cont.)

SOV/6371

- 47. Rayevskiy, S. Ya. Analogue of A. Ya. Khinchin's Theorem on the Spectral Representation of the Correlation Function for Nonstationary Random Processes 239
- 48. Raybman, N. S. Correlation Methods for Determining the Approximate Characteristics of Automatic Lines 245
- 49. Sveshnikov, A. A. Probability Methods for Investigating the Swell of the Sea and the Rolling of a Ship 251
- 50. Tempel'man, A. A. Ergodic Properties of Homogeneous Random Fields Over Groups 253
- 51. Timofeyev, D. V., and A. S. Frolov. Application of a Method for Statistical Tests to the Calculation of Certain Regimes of Electric Systems 257

Transactions of the 6th Conf. on Probability Theory and Mathematical Statistics and of the Symposium on Distributions in Infinite-Dimensional Spaces held in Vil'nyus, 5-10 Sep '60. Vil'nyus Gospolitizdat Lit SSR, 1962. 493 p. 2500 copies printed

S/020/62/144/004/005/024
B172/B112

AUTHOR: Tempel'man, A. A.

TITLE: An ergodic theorem for random fields homogeneous in a broad sense

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 144, no. 4, 1962, 730-733

TEXT: Von Neumann's ergodic theorem in the theory of random processes states that a mean value which is invariant with respect to displacements exists for each continuous process and is stationary in a broad sense. Here this theorem is generalized in two directions: (1) for random fields, homogeneous in a broad sense, over the Euclidean space R^m and (2) for random fields, homogeneous and continuous in a broad sense over groups. For this purpose the author defines the concepts "p-ergodic generalized sequence" (for functions from the space K of the finite functions differentiable any number of times) and "left-hand ergodic generalized sequence" (for functions over a local bicomact group G or for measurable sets over G). Left-hand ergodic sequences are a generalization of the ergodic sequences of sets as defined for unimodular groups by Boclé and

Card 1/2

An ergodic theorem for...

S/020/62/144/004/005/024
B172/B112

Calderon. Various examples for p-ergodic and left-hand ergodic sequences are given. The theorems formulated in the paper generalize the results obtained by Wiener, Calderon, Lyubarskiy and Struble. ✓

PRESENTED: January 19, 1962, by A. N. Kolmogorov, Academician

SUBMITTED: September 25, 1961

Card 2/2

GOLOSOV, Yu.I.; TEMPEL'MAN, A.A.

Likelihood ratio for the hypotheses covering the trend of
certain Gaussian processes. Dokl. AN SSSR 153 no.6:1242-
1244 D '63. (MIRA 17:1)

1. Institut fiziki i matematiki AN Litovskoy SSR. Predstav-
leno akademikom A.N. Kolmogorovym.

TEMPELMAN, R. G.

Zhuravlev, V. F., Lesoklin, I. G. and Tempelman, R. G., Kinetics of the formation reactions of aluminates and the role of the mineralizers in this process. p. 887

The purpose of this work was to investigate 1) the rate of binding in lime in the process of caking of the mixture of calcium carbonate and aluminum oxide; 2) the microscopic and x-ray determination of the character of the compounds which form initially during calcination of the mixture of calcium carbonate and aluminum oxide, independently from the ratio of the components of the initial batch; 3) the influence of the addition of CaF_2 upon the formation rate of calcium aluminates in the process of caking of lime and aluminum oxide.

The Lensoviet Technological Institute, Leningrad.
February 9, 1946

SO: Journal of Applied Chemistry (USSR) 21, No. 9 (1948)

TEMPEL'MAN, R. G.

USSR/Chemistry - Aluminates
Aluminum

Jul 48

"Problem of the Chemistry of Some High-Aluminum Content Aluminates," V. F. Zhuravlev,
R. G. Tempel'man, Leningrad Technol Inst imeni Lensovet, 4 pp

"Zhur Prik Khim" Vol XXII, No 7

Clinkering of alumina with fluorides of sodium, potassium, calcium, magnesium, barium,
calcium chloride, and cryolite at 900-1,200° C along with a change in the ration of
the components of the original mixture from 1:4 to 1:9 results in the formation of
aluminates with a high aluminum content. Includes a table of such aluminates.
Submitted 23 Nov 48.

PA66/49T17

C

3-6-52

USE OF PHOTOSTAMPING TO DECORATE GLASS SHAPES WITH CURVED SURFACES. R. G. Fempel'man and A. N. Tikhonov. Legkaya Prom., 11[4]26-29 (1951).--The methods for copying an image directly and by means of a flexible film, for conical, spherical, and cylindrical shapes are described. A device with mirror strips insures uniform exposure of shape to the light. Illustrated.

R. Z. K.

TEMPEL'MAN, R.G.

Effect of titanium dioxide on characteristics of silicate glasses.

Legkaya Prom. 12, No.8, 34-6 '52.

(MLBA 5:7)

(CA 47 no.18:9581 '53)

TEMPER, A.S., mayor meditsinskoy sluzhby; BOKHANOV, H.V., mayor meditsinskoy sluzhby; ZAGRANICHNIYY, L.A., mayor meditsinskoy sluzhby; YEZHOV, A.S., podpolkovnik meditsinskoy sluzhby; KATASONOV, S.V., podpolkovnik meditsinskoy sluzhby

Role of prophylactic additions of vitamins to food in the decrease of morbidity. Voен.-med.zhur. no.3:49-51 Mr '61. (MIRA 14:7)
(VITAMINS) (SOLDIERS—DISEASES AND HYGIENE)

USSR / Pharmacology, Toxicology. Analeptics. V

Abs Jour: Ref Zhur-Biol., No 18, 1958, 85128.

Author : ~~Temper, B. A.~~ Sukhanova, G. I.

Inst : Not given.

Title : The Use of Ginseng in Hypoacidic and Anacidic Forms of Chronic Gastritis.

Orig Pub: In the collection, Materialy k izuch. zhen'shenya i limonnika, No 3, Leningrad, 1958, 100-103.

Abstract: 40 patients aged 20-50 years and over were studied for the influence of a liquid extract of the ginseng root (G) on the course of chronic gastritis. G was given in doses of 10-20 drops 2-3 times a day. A course of therapy lasted an average of 20 days. In chronic hypo- and anacidic gastritis, G facilitated elimination of pain, increase in appetite, and normalization of the stool. Less con-

Card 1/2

TEMPER, B.A., prof.; MOROZ, R.I., kand.med.nauk; CHERNYSHEVA, A.V. (Khabarovsk)

Course of Botkin's disease in pregnancy [with summary in English].
Klin.med. 37 no.2:67-71 F '59. (MIRA 12:3)

1. Iz kafedry gospital'noy terapii (zav. - prof. B.A. Temper) Khabarovskogo meditsinskogo inatituta (dir. - dots. S.K. Nechepayeva).
(HEPATITIS, INFECTIOUS, in pregn.
case reports (Rus))
(PREGNANCY, compl.
infect. hepatitis (Rus))

TEMPER, B.A.

Lambliasis; based on clinical materials for a five-year period.
Trudy Khab.med.inst. no.20:49-56 '60. (MIRA 15:10)

1. Iz kliniki gospital'noy terapii (zav. prof. B.A.Temper)
Khabarovskogo meditsinskogo instituta.
(GIARDIASIS)

TEMPER, B.A.; VASILEVSKAYA, N.P.; MOROZ, R.I.; SMYSHLYAYEVA, A.P.

Characteristics of the arterial pressure in young people in the city of Khabarovsk; report No. 1. Trudy Khab.med.inst. no.20:162-170 '60. (MIRA 15:10)

1. Iz kafedry gospital'noy terapii (zav. prof. B.A.Temper) Khabarovskogo meditsinskogo instituta.
(Khabarovsk--BLOOD PRESSURE)