

**2008 18th International Conference
«Microwave & Telecommunication Technology»
10-14 September 2008
Sevastopol, Crimea, Ukraine
<http://www.crimico.org>
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C O N F E R E N C E P R O G R A M



2008

Organized and Sponsored by:

Sevastopol National Technical University (Ukraine)
Belarus State University of Informatics and Radioelectronics (Minsk)
Research-and-production corporation «Integral» (Minsk, Belarus)
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Technical Co-Sponsorship:

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News agency «BELTA» (Minsk, Belarus)
Education Portal (Kiev, Ukraine)
«Technology & Designing in Electronic Equipment» Magazine (Odessa, Ukraine)
«Microwave Devices & Components» Magazine (Odessa, Ukraine)
COST Action/Network 284 on «Innovative Antennas for Emerging Terrestrial & Space-based Applications»
IEEE ED Society
IEEE MTT/ED Central Chapter, Ukraine Section
IEEE AP Chapter, Russia Section

FOREWORD

The Program Committee has selected and included 396 claimed papers into the program of the conference at the sessions, which took place in Fryazino (Moscow region, Russia) on 2 June, 2008. During the four working days of this year's conference the papers will be presented by scientists and specialists from 150 universities and companies of Belarus, Brazil, China, Germany, Israel, Italy, Korea, Mexico, Moldova, UK, Ukraine and USA at the two plenary and 30 technical sessions:

- Session 1/1: Integrated Microwave Devices
- Session 1/2: Microwave Diodes and Devices
- Session 1a: Solid State Devices CAD/CAM
- Session 2/1: Physical Fundamentals of Microwave Electronics
- Session 2/2: O-type & DRO Microwave Devices
- Session 2/3: M-type Devices & Gyrodevices
- Session 3/1: Broadband Wireless Access Systems
- Session 3/2: Superwideband Radio Systems
- Session 3/3: Telecommunication Systems' Means
- Sessions 3/4-3/5: Information Resources & Networks
- Session 4/1: Antenna Arrays
- Session 4/2: Microwave Antennas
- Session 4/3: Antenna Elements & Microwave Devices
- Session 5/1: Filters & Resonators
- Session 5/2: Multiport, Controlled & Nonmutual Devices
- Session 5a: SHF-Devices Materials & Technology
- Sessions 5b/1-5b/2: Nanoelectronics & Nanotechnology
- Session 6: Very High Power Microwave Electronics and Effects
- Session 6a: EM and Radiation Resistance of Materials & Electronic Component Base
- Session 7/1: Changing Parameters of Microwave Devices & Signals
- Session 7/2: Microwave Measurements in Microelectronics
- Session 7/3: Materials Measurement
- Session 8/1: Objects and Media Parameters Gauges
- Session 8/2: Functional Units
- Session 8a: Medical & Ecological Applications
- Session 9/1: Radioastronomy & Atmosphere Research
- Session 9/2: Radars and Remote Sensing
- Session H: History of Radioengineering Research

Since 2001, the leading scientific libraries of the CIS countries get 20 copies of CriMiCo proceedings for free (Belarus, Moldova and Russia – CDs; Ukraine – books and CDs). Some part of the edition (books and CDs) is sent to the leading foreign libraries.

Since 2005, CriMiCo Organizing Committee has instituted prizes for young scientists and post-graduates for the best papers presented at the Conference.

Organizing Committee would like to express its gratitude to all the delegates who deemed it possible to share the practical results of their work with others. We hope that the Crimean autumn season will make for holding of the Conference, as it always was: the sea is warm enough and the weather is not so hot!

Organizing Committee is glad to welcome the delegates whose papers have been included into the program of the Conference, as well as everyone who would be interested in CriMiCo'2008!

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A. F. Yanenko, Professor, NTUU «KPI», Kiev, Ukraine

GENERAL INFORMATION

VENUE

The Conference will be held between 8 and 12 September, 2008 at the Sevastopol National Technical University.

CONFERENCE SCHEDULE

(local time)

September 7	7.00 a.m. - 5.00 p.m.	Registration and accommodation
September 8	7.00 a.m. - 8.45 a.m. 9.00 a.m. - 10.30 a.m. 10.30 a.m. - 10.45 a.m. 11.00 a.m. - 6.00 p.m.	Delegates registration Opening Session. 1 st Plenary Session Photographing Technical Sessions
September 9	8.30 a.m. - 6.00 p.m. 7.00 p.m. - 11.00 p.m.	Technical Sessions Banquet («Omega» boarding house)
September 10		Excursions
September 11	8.30 a.m. - 10.30 a.m. 10.30 a.m. - 12.00 a.m.	2 nd Plenary Session Organizing and Program Committee Session
September 12	2.00 p.m. - 3.00 p.m.	3 rd Plenary Session. Presentation of Organizing Committee Prizes. Closing Session

REGISTRATION

Delegates of the Conference and Workshops will be registered:

- on Sunday, September 7, from 7.00 a.m. to 5.00 p.m. in the vestibule of Sevastopol National Technical University main building (Studgorodok). Organizing Committee offers its services in transporting the delegates from the railway station to SevNTU. Departure from the railway station square at 6.45 a.m., 8.00 a.m., 11.15 a.m., 1.30 p.m. and 4.00 p.m.

- on Monday, September 8, from 7.00 a.m. to 8.45 a.m. in the vestibule of SevNTU main building (Studgorodok).

Delegates are requested to produce papers confirming their registration fee payments.

ARRANGEMENTS & COSTS

Participants

Registration fee includes: Invitation for visa, Conference Proceedings, Interpreter service, Banquet, Excursion related to the subject of the Conference.

Paid before July 31: \$275 (\$220 for IEEE members);

Paid after July 31: \$300 (\$240 for IEEE members).

Accompanying persons

Invitation for visa, Interpreter service, Banquet, Excursion

Paid before July 20: \$100

Paid after July 20: \$110

Please, pay at:

:56: Intermediary Bank: BANK OF NEW YORK
ONE WALL STREET, NEW YORK, N.Y. 10015, USA, SWIFT CODE: IRVT US 3N

:57: Beneficiary Bank: acc\ 890-0057-211
JSC "KREDOBANK"
LVIV, UKRAINE,
CRIMEAN BRANCH, SIMFEROPOL.
SWIFT CODE: WUCBUA2X

:58: Beneficiary: TOV "Krym. naukov-tehn. tsentr im. A. S. Popova" № 2600901019275

Please, indicate the purpose of payment:
Registration payment, CriMiCo'2008.

Please, enter the data of payment into applied registration form and send it
via e-mail: crimico.fin@gmail.com.

OBTAINING UKRAINIAN VISA

In most cases, in order to visit Crimea you will need Ukrainian visa. Please, fill in the following Questionnaire for yourself and all accompanying persons and forward it to the Conference Chairman Dr. Pavel P. Yermolov via e-mail. The Organizing Committee will issue and send you the Official Invitation Letter for obtaining Ukrainian Visa via e-mail. In order to get your visa, submit that Letter to the Ukrainian Embassy or Consulate in your country. Please make sure you apply well in advance.

Questionnaire (please fill in a Questionnaire for each of the accompanying persons also):

First name(s)*:	E-mail:
Middle name*:	Citizenship:
Surname*:	Country & town where you'll get visa:
Date of birth:	Passport number*:
Country:	Number of accompanying persons:
Company (full name):	Passport is valid until:
Position:	When passport was given:
Company address:	By Whom passport was given:
Male/Female:	Registration fee \$... will be paid by transfer
Phone:	to the bank account on ... June (July,
Fax:	August)

* - transcription here should be identical to the one in the passport!

Official invitation letter for Ukrainian visa will be sent only after receiving your e-mail letter of inquiry before August 15.

TRANSPORTATION

The Organizing Committee offers its services in transporting the delegates on September, 9 from Simferopol Airport (80 km from Sevastopol) to Sevastopol by taxi, as well as return transportation on September, 15. Representatives of the Organizing Committee will meet you at the airport and accompany to the hotel. Taxi fare is approx. USD70 one way. You should inform the Organizing Committee about your arrival via e-mail, advising of your name and name(s) of the accompanying person(s). It would be better, if you take the flight

PS408 Frankfurt – Simferopol on 6 September, which leaves Frankfurt at 11:10 a.m. and arrives to Simferopol at 3:15 p.m. and flight PS409 Simferopol – Frankfurt on 13 September, which leaves Simferopol at 4:35 p.m. and arrives to Frankfurt at 6:50 p.m. In case of necessity, car transportation from hotel to the airport can be provided after the conference.

HOTEL ACCOMMODATION

The Conference delegates are entitled to accommodation in hotel «Delfin». The hotel room categories are from 440 to 690 grivnya (grn) per night. Rate of grivnya exchange is about 5.05 grivnyas (grn) for \$1 and 6.96 grivnyas (grn) for €1.

Prices for accommodation (grn per night) in hotel «Delfin»

Room, category	Price per night, grn.
Single – Double, 1 room	490
Single – Double, 2 room	740

SOCIALS

Conference participants will be offered a cultural program. On 7 September (the day of registration) you can take part in the excursion and learn about history, sights and cultural life of the Crimea. The excursion will be conducted by «RAMUT-SEVASTOPOL-TUR» tour agency, whose representative will attend at the registration. 10 September is the day of excursion related to the subject of the Conference. It has become usual for participants of the last year CriMiCo conferences. That's why those people who come at the Conference for the first time show great interest to it. The trip lies through Katsiveli, where Crimean Astrophysical Observatory is situated. There will be an opportunity to see radio-telescope RT-22 and some other equipment. Wine-testing at Massandra Wine Works will close the excursion.

Please, fill in the registration form at www.crimico.org regarding accommodation and send it via e-mail: crimico.accomodation@gmail.com. IT IS OBLIGATORY!

The deadline for CriMiCo'2008 registration forms submission is 25 AUGUST!!!

MONDAY, SEPTEMBER 8

	Aud. 420	Aud. 418	FESTO	Library aud. 304	Library aud. 310	Library aud. 206
9.00-10.30	1 st PLENARY SESSION	Welcome address INV.1: A. A. Strel'nitsky and authors (077)				
10.30-10.45	PHOTOGRAPHING					
10.45-11.00	COFFEE BREAK					
11.00-13.00			1/1. Integrated Microwave Devices	2/1. Physical Fundamentals of Microwave Electronics	INV.7 3/1. Broadband Wireless Ac- cess Systems	7/1. Changing Parameters of Microwave De- vices & Signals
13.00-14.00	LUNCH TIME					
14.00-16.00			1/2. Microwave Diodes and Devices	2/2. O-type & DRO Microwave Devices	INV.8 3/2. Superwide- band Radio Systems	7/2. Microwave Measurements in Microelec- tronics
16.00-16.15	COFFEE BREAK					
16.15-18.00			1a. Solid State Devices CAD/CAM	2/3. M-type De- vices & Gyrode- vices	INV.9 3/3. Telecom- munication Sys- tems' Means	7/3. Materials Measurement

TUESDAY, SEPTEMBER 9

	Aud. 420	Aud. 418	FESTO	Library aud. 304	Library aud. 310	Library aud. 206
8.30-10.30			4/1. Antenna Arrays	6. Very High Power Microwave Electronics and Effects	3/4. Information Resources & Networks I	INV.10 5b/1. Nanoelectronics & Nanotechnology I
10.30-10.45	COFFEE BREAK					
10.45-12.45			4/2. Microwave Antennas	6a. EM and Radiation Resistance of Materials & Electronic Component Base	3/5. Information Resources & Networks II	INV.11 5b/2. Nanoelectronics & Nanotechnology II
12.45-13.45	LUNCH TIME					
13.45-15.45			4/3. Antenna Elements & Microwave Devices	INV.12 8/1. Objects and Media Parameters Gauges	5/1. Filters & Resonators	9/1. Radio-astronomy & Atmosphere Research
15.45-16.00	COFFEE BREAK					
16.00-18.00			5a. SHF-Devices Materials & Technology	8/2. Functional Units	5/2. Multiport, Controlled & Nonmutual Devices	9/2. Radars and Remote Sensing

WEDNESDAY, SEPTEMBER 10

EXCURSION DAY

THURSDAY, SEPTEMBER 11

	Aud. 420	Aud. 418	FESTO	Library aud. 304	Library aud. 310	Library aud. 206
8.30-10.30		2 nd PLENARY SESSION	INV.2: M. N. Gladkov and authors (395) INV.3: V. I. Markov and authors (192) INV.4: A. O. Kasyanov and authors (258) INV.5: A. B. Gapeyev and authors (218)			
10.30-11.00	COFFEE BREAK					
11.00-13.00		8a. Medical & Ecological Ap- plications				
13.00-14.00	LUNCH TIME					
14.00-16.00		INV.6 H. History of Radioengi- neering Re- search				
16.00-18.00		Organizing and Program Committee Session				

FRIDAY, SEPTEMBER 12

	Aud. 420	Aud. 418	FESTO	Library aud. 304	Library aud. 310	Library aud. 206
14.30-16.00	3 rd PLENARY SESSION	Presentation of Organizing Committee Prizes. Closing Session				

MONDAY, 8 SEPTEMBER

1st PLENARY SESSION
SevNTU (Studgorodok), aud. 420

MONDAY, 9.00-10.30

WELCOME ADDRESS

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Program Committee Co-Chairman,*
M. P. BATURA, Professor

*Pro-Rector of National Technical University of Ukraine "KPI" (Kiev),
Program Committee Co-Chairman,*
M. Ye. ILCHENKO, Corresponding Member of NAS of Ukraine, Professor

INV.1	THEORY AND PRACTICE OF CONSTRUCTION OF RADIO CHANNELS OF LOCAL WIRELESS NETWORKS WITH ADJUSTED QUALITY OF INFORMATION TRANSMISSION	Strelnitskiy A. A. Strelnitskiy A. E. Tsopa A. I. Shokalo V. M.	Kharkiv National University of Radio Electronics	Kharkiv	Ukraine	077
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SESSION 1/1: INTEGRATED MICROWAVE DEVICES

SevNTU (Studgorodok)
aud. Festo

MONDAY, 11.00-13.00

Co-Chairmen:
A. A. KISTCHINSKY, C.Sc.
"Microwave systems" Close Corporation, Moscow, Russia
M. I. POYGINA, C.Sc.
Microtek Co., Kiev, Ukraine

1.1	RESULTS OF DEVELOPMENT OF FOURCHANNEL TRANSMIT-RECEIVE SHF MICRO-MODULES	Antsev G. V. Bykadorov A. A. Boulatov A. A. Toupikov V. A. Shor E. D. Frantzousov A. D. Tchizhov A. I.	SALUT-27 SPE Close Corporation Radar-mms SPE Public Corporation	Nizhny Novgorod, St. Petersburg	Russia	003
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1.2	X-BAND HIGH PULSE POWER AMPLIFIER	Baranov A. V.	Eldorado Co.	Nizhny Novgorod	Russia	007
1.3	E CLASS UHF HIGH-POWER OSCILLATOR	Baranov A. V.	Eldorado Co.	Nizhny Novgorod	Russia	008
1.4	MILLIMETER WAVE RECEIVER FOR COMMUNICATION CIRCUITS	Kuzmin S. E. Ovsiannikov Y. V. Radzikhovskiy V. N. Pylipenko A. M.	State Research Center "Iceberg" OJS "Saturn"	Kuev	Ukraine	061
1.5	ULTRA STABLE MILLIMETER WAVE OSCILLATOR INTENDED FOR SPACE PROJECT "PHOBOS – GRUNT"	Kosov A. S. Gotlib V. M. Zotov V. A.	Space Research Institute Russian Academy of Sciences	Moscow	Russia	268
1.6	UHF CLASS E RING OSCILLATOR WITH TWO FETs	Krizhanovski V. G. Printsovskiy V. A.	Donetsk National University	Donetsk	Ukraine	251
1.7	X-BAND MMIC BROADBAND LOW-NOISE AMPLIFIERS BASED ON 0.15 μm GaAs PHEMT TECHNOLOGY	Mokerov V. G. Babak L. I. Fedorov Yu. V. Cherkashin M. V. Sheherman F. I. Bugaev A. S. Kuznetsov A. L. Gnatyuk D. L.	Institute of Microwave Semiconductor Electronics, RAS Tomsk State University of Control Systems and Radioelectronics	Moscow Tomsk	Russia	269
1.8	MICRO WAVE GaAs MIC DISCRETE PHASE SHIFTERS OF C-BAND WITH INBUILT CONTROL DRIVER	Arzhanov S. N. Arykov V. A. Barov A. A. Gyunter V. Ya. Lilenko Yu. V.	Micran Co.	Tomsk	Russia	319
1.9	C-X & K-BAND WIDEBAND MMIC AMPLIFIERS	Krutov A. V. Rebrov A. S.	FSUE "RPC "Istok"	Fryazino	Russia	370
1.10	HIGH POWER INTERNALLY MATCHED TRANSISTOR OF R&PC "ISTOK"	Liapin L. V. Manchenko L. V. Pchelin V. A. Tregubov V. B.	Federal State Unitary Corporation R&PC «Istok»	Fryazino	Russia	359
poster papers						
1.11p	DC–2 GHz 4-BIT DIGITAL MMIC ATTENUATOR WITH A SMALL INSERTION PHASE	Lee A. I. Tolstolutskiy S. I. Kazachkov V. V.	Research Institute of Radiocommunications	Rostov-on-Don	Russia	356
1.12p	L-BAND GaAs MMIC AMPLIFIER	Bezus S. V. Tolstolutskiy S. I. Lee A. I. Tolstolutskaja A. V. Kazatchkov V. V. Komor V. P.	Research Institute of Radiocommunications	Rostov-on-Don	Russia	357
1.13p	ELIMINATION OF PARASITIC GENERATION IN POWER X-BAND INTERNALLY MATCHED TRANSISTORS WITH HIGH ASSOCIATED GAIN	Galdetskiy A. V. Manchenko L. V. Pashkovskii A. B. Pchelin V. A.	Federal State Unitary Corporation R&PC «Istok»	Fryazino	Russia	361
1.14p	MICROWAVE OSCILLATIONS IN LOG-PERIODIC ANTENNA INTEGRATED WITH A FIELD-EFFECT TRANSISTOR	Lyubchenko V. E. Yunevich E. O. Kotov V. D. Kalinin V. I.	Institute of Radio Engineering and Electronics Russian Academy of Sciences	Fryazino	Russia	048

1.15p	DETECTOR OF MICROWAVE RADIATION ON THE BASIS OF Bi1-xSbx FILM	Plaksiy V. T. Arkhipov A. V. Botsula O. V. Prokhorov E. D. Dyadchenko A. V. Chueshkov D. P. Shalaev V. A.	Institute of Radio-physics and Electronics National Academy of Sciences of Ukraine V. Karazin National University	Kharkov	Ukraine	100
1.16p	SIMULATION OF DYNAMIC TEMPERATURE DISTRIBUTION OF HIGH POWER MICROWAVE DEVICES AND NEW FLIP-CHIP DESIGN	Galdetskiy A. V. Vorobiyov A. A. Shiriaeva E. V.	FSUE "Istok"	Fryazino	Russia	369
1.17p	THE DIAGNOSTICS OF HETEROEPITAXIAL STRUCTURES GaAs/AlGaAs/GaAs BASED ON TECHNIQUE OF SELECTIVE ETCHING	Kozlovskiy E. Y. Seleznev B. I.	CJSC "SMF "Planeta-Argall" Yaroslav's the Wise Novgorod State University	Novgorod the Great	Russia	392
1.18p	DESIGN OF L-, S- AND C-BAND LOW NOISE AMPLIFIERS	Platonov S. V. Osipov A. M.	Planeta-Argall Co.	Novgorod the Great	Russia	394

SESSION 1/2: MICROWAVE DIODES AND DEVICES

**SevNTU (Studgorodok)
aud. Festo**

MONDAY, 14.00-16.00

Co-Chairmen:

N. F. KARUSHKIN, C.Sc.

SRI "Orion", Kiev, Ukraine

M. I. POYGINA, C.Sc.

Microtek Co., Kiev, Ukraine

1.19	ADJUSTABLE OSCILLATOR ON GUNN DIOE OF 5-MM RANGE	Egunov M. S. Votoropin S. D.	JSC «NIIPP», Tomsk, Russia	Tomsk	Russia	004
1.20	DEVICE ON THE BASIS OF INTERVALLEY ELECTRON TRANSFER EFFECT	Votoropin S. D. Khan A. V.	JSC "NIIPP", Tomsk, Russia	Tomsk	Russia	006
1.21	EVALUATION OF THE SCHOTTKY BARRIER PARAMETERS IN THE MICRON-SIZE METAL-SEMICONDUCTOR CONTACTS	Averin S. V. Lyubchenko V. E.	Institute of Radioengineering and Electronics, Russian Academy of Sciences	Fryazino	Russia	050
1.22	THE RESEARCH OF AVALANCHE DIODE NOISE GENERATION IN ANOMALY MODE	Loshitskiy P. P. Pavlyuchenko A. V.	The National Technical University of Ukraine "KPI"	Kiev	Ukraine	064
1.23	THE RESEARCH OF THE STATIC SILICON AVALANCHE DIODE'S CHARACTERISTICS IN SUPER WIDE NOISE GENERATOR MODE	Loshitskiy P. P. Pavlyuchenko A. V.	The national technical University of Ukraine "KPI"	Kiev	Ukraine	065

1.24	TEMPERATURE FEATURE ANALYSIS OF AUTODYNE OSCILLATORS ON GUNN DIODE	Votoropin S. D. Noskov V. Ya. Smolskiy S. M.	NIIPP, USTU (UPI), Tomsk MPEI (TU)	Yekaterinburg Moscow	Russia	142
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1.28	MICROWAVE-BASED SEMICONDUCTOR IONIZING RADIATION DETECTORS	Gordienko Y. E. Borodin B. G.	Kharkiv National University of Radioelectronics	Kharkov	Ukraine	400
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1.29p	LOW BARRIER SCHOTTKY DIODES IN THE TECHNOLOGY OF LIMITER'S PRODUCTION	Egorova E. I. Kozlovskiy E. Y.	CJSC "SMF "Planeta-Argall"	Novgorod the Great	Russia	391
1.30p	5-6 GHz BAND GaAs MMIC FIVE BIT DIGITAL ATTENUATOR	Osipov A. M. Semyonova L. M. Radchenko V. V.	CC "SPE "Planeta- Argall" FGUE CNIRTI	Novgorod the Great Moscow	Russia	393

SESSION 1a: SOLID STATE DEVICES CAD/CAM

**SevNTU (Studgorodok)
aud. Festo**

MONDAY, 16.15-18.00

Co-Chairmen:

B. N. SHELKOVNIKOV, C.Sc.

NTUU "Kiev Polytechnic Institute", Ukraine

A. I. LUCHANINOV, Professor

Kharkov National University of Radioelectronics, Ukraine

1a.1	ANTIPODAL SLOT LINE – NUMERICAL ANALYSIS	Klyuev S. B. Nefyodov E. I. Wusheng Ji	*V. A. Kotelnikov Radioelectronics Institute, RAS City Institute of Lanzhou	Fryazino Lanzhou	Russia China	401
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1a.3	SYNTHESIS OF MMICS BASED ON PASSIVE ELEMENT MODEL TRANSFORMATION	Babak L. I.	Tomsk State University of Control Systems and Radioelectronics (TUCSR)	Tomsk	Russia	213
1a.4	"VISUAL" DESIGN OF MATCHING NETWORKS FOR MMICS	Sheherman F. I. Babak L. I.	Tomsk State University of Control Systems and Radioelectronics (TUCSR)	Tomsk	Russia	214

1a.5	SYNTHESYS OF LUMPED- AND DISTRIBUTED-ELEMENT MATCHING NETWORKS USING THE GENETIC ALGORITHM	Dorofeev S. Yu. Babak L. I.	Tomsk State University of Radioelectronics and Control Systems	Tomsk	Russia	264
1a.6	MODELING OF NONLINEAR SCHEMES IN TIME DOMAIN, WHICH CONTAIN TRANSMISSION LINES AND NETWORKS WITH LUMPED PARAMETERS	Vlasenko L. A. Rutkas A. G. Luchaninov A. I.	Karazin Kharkov National University, Kharkov National University of Radioelectronics	Kharkov	Ukraine	141
1a.7	FLICKER NOISE SIMULATION IN MIXER CIRCUIT ON MOS-FET	Krizhanovski V. V. Rassokhina Yu. V. Krizhanovski V. G. Bondarev B. V.	Information and Communications University Daejeon, Republic of Korea Donetsk National University, Radio-physics Dept.	Daejeon Donetsk	Korea Ukraine	250
1a.8	NUMERICAL ANALYSIS AND OPTIMIZATION OF DOUBLE AVALANCHE REGION IMPATT DIODE	Zemliak A. M. Cabrera S.	Puebla Autonomous University National Technical University of Ukraine "KPI"	Mexico Kiev	Mexico Ukraine	041
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1a.10p	FREQUENCY DISPERSION IN GaAs METAL–SEMICONDUCTOR FIELD-EFFECT TRANSISTOR TRANSDUCTANCE	Prokhorov E. F. Gorev N. B. Kodzhespirova I. F. Privalov E. N.	Centro de Investigación en Materiales Avanzados Institute of Technical Mechanics	Chihuahua Dnepropetrovsk	México Ukraine	028
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1a.12p	MEMS MACROMODELS CONSTRUCTION METHOD	Petrenko A. I. Ladogubets V. V. Beznosyk A. Y. Finogenov A. D. Tchkalov A. V.	National Technical University of Ukraine "KPI"	Kiev	Ukraine	096
1a.13p	THE INFLUENCE OF BARRIER HEIGHT ON THE CURRENT SENSITIVITY OF A MICROWAVE SCHOTTKY DETECTOR	Shnitnikov A. S. Gudkova N. B.	Moscow Power Engineering Institute Res. and Prod. Corp. "Istok"	Moscow Fryazino	Russia	118
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1a.15p	SEMICONDUCTOR SURFACE QUALITY INFLUENCE ON MESFET'S PARAMETERS	Martynov Y. B. Pogorelova E. W.	FSUE RPC «Istok»	Fryazino	Russia	360
1a.16p	RANDOM INHOMOGENEITIES IN MICRORESONATOR: THEORY AND MODELING AT MILLIMETER WAVE BAND	Ganapolskii E. M. Eremenko Z. E. Tarasov Yu. V.	Usikov Institute for Radiophysics and Electronics of NASU	Kharkov	Ukraine	075

SESSION 2/1: PHYSICAL FUNDAMENTALS OF MICROWAVE ELECTRONICS

**SevNTU (Studgorodok)
aud. 304 (library)**

MONDAY, 11.00-13.00

Co-Chairmen:

A. A. KURAYEV, Professor

Belarus State University of Informatics and Radioelectronics, Minsk

G. I. CHURYUMOV, Professor

Kharkov National University of Radioelectronics, Ukraine

2.1	AMPLIFIERS, FREQUENCY MULTIPLIERS, OSCILLATORS ON GYROTONS	Kolosov S. Kurayev A. A.	Byelarusian State University of Informatics and Radioelectronics	Minsk	Byelarus	030
2.2	EXCITATION EQUATIONS FOR THE LONGITUDINALLY-IRREGULAR WAVEGUIDE WITH FINITE CONDUCTIONS OF THE WALLS	Kolosov S. Kurayev A. A. Kharseyev A.	Byelarusian State University of Informatics and Radioelectronics	Minsk	Byelarus	031
2.3	FREQUENCY DOUBLERS WITH CROSS-SECTION MODULATION OF THE ELECTRON BEAM	Batura M. P. Kurayev A. A. Sinitsyn A. K. Tsyrelchuk I. N.	The Belarus State University of Computer Science and Radio Electronics	Minsk	Belarus	032
2.4	CALCULATION OF REFLECTION FACTOR H ₀₁ - WAVES OF A ROUND WAVEGUIDE FROM A DIELECTRIC WINDOW WITH A COMPENSATING GROOVE	Kurayev A. A. Naranovich O. I. Sinitsyn A. K.	The Belarus State University of Computer Science and Radio Electronics	Minsk	Belarus	067
2.5	THE STUDY OF CHARACTERISTICS OF GENERATION OF ELECTRON BEAM IN THE REGIME OF VIRTUAL CATHODE FORMATION IN THE PRESENCE OF SECONDARY EMISSION	Egorov E. N. Kalinin Yu. A. Hramov A. E.	Saratov State University, Saratov, 410012, Russia	Saratov	Russia	175
2.6	ELECTRODYNAMIC DESCRIPTIONS OF THE IRREGULAR OPEN WAVEGUIDE WITH THE MIRRORS PHASE CORRECTION	Vorobjov G. S. Krivets A. S. Rybalko A. A. Zhurba V. O.	Sumy State University	Sumy	Ukraine	179
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2.8	POTENTIAL AND ROTATIONAL SPACE-CHARGE FIELDS IN A FREE ELECTRON MASER	Goryashko V. A. Ilyenko K.	Institute for Radio-physics and Electronics, NASU	Kharkov	Ukraine	261
2.9	NON-RELATIVISTIC DYNAMICS OF CHARGED PARTICLES MOVING IN A CYLINDRICAL DRIFT TUBE	Yatsenko T. Ilyenko K. Kovalenko A. G.	Institute for Radio-physics and Electronics, NASU Ukrainian State Railroad Academy	Kharkov	Ukraine	312
2.10	NONLINEAR DYNAMICS OF ELECTRONS IN A PUMP MAGNETIC FIELD OF A FREE ELECTRON MASER	Ilyenko K. Goryashko V. A.	Institute for Radio-physics and Electronics, NASU	Kharkov	Ukraine	280

SESSION 2/2: O-TYPE & DRO MICROWAVE DEVICES

**SevNTU (Studgorodok)
aud. 304 (library)**

MONDAY, 14.00-16.00

Co-Chairmen:

A. A. SHMATKO, Professor

Karazin Kharkov National University, Ukraine

V. D. YERYOMKA, C.Sc.

Usikov Institute of Radio-Physics and Electronics at NASU, Kharkov, Ukraine

2.11	ABOUT ONE OF THE POSSIBLE MECHANISMS OF REALISATION OF SUPERRADIANCE OPERATIONS IN THE RELATIVISTIC BWO AND TWT	Kurayev A. A. Sinitsyn A. K.	Byelarusian State University of Informatics and Radioelectronics	Minsk	Belarus	057
2.12	THREE-STAGE RELATIVISTIC KLYSTRON-OSCILLATOR	Gourinovitch A. B. Kurayev A. A. Sinitsyn A. K.	Byelarusian State University of Informatics and Radioelectronics	Minsk	Belarus	069
2.13	DIFRACTION RADIATION OSCILATOR WITH MULTISTAGE INTERACTION SPACE	Miroshnichenko V. S. Pivovarova A. G.	S.A. Ya. Usikov's Institute of Radio Physics and Electronics of the NASU	Kharkov	Ukraine	085
2.14	MULTIBEAM ELECTRON-OPTIC SYSTEM OF MINATURE MILLIMETER BAND TWT WITH FOCUSING BY THE REVERSED MAGNETIC FIELD OF PERMANENT MAGNETS	Galdetskiy A. V. Golenitskij I. I. Dukhina N. G. Kanevskij E. I. Saprynskaja. L. A.	Federal State Unitary Enterprise "Istok"	Fryazino	Russia	368
2.15	MODE EXCITATION IN DRO WITH PHASE SHIFT OF THE FIELD IN THE MIDDLE OF INTERACTION SPACE	Miroshnichenko V. S. Senkevich Ye. B. Yudintsev D. V.	The A.Ya. Usikov's Institute of Radio Physics and Electronics of the NASU	Kharkov	Ukraine	124
2.16	THE EFFECT OF NONUNIFORM FOCUSING MAGNETIC FIELD ON OROTRON GENERATION	Myasin Ye. A. Il'yin A. Yu. Evdokimov V. V.	Fryazino Branch of the IRE RAS	Fryazino	Russia	159

2.17	OROTRON ON 1-mm WAVELENGTH ON THE SECOND SPACE HARMONIC	Solovyov A. N. Myasin Ye. A.	Fryazino Branch of the IRE RAS	Fryazino	Russia	320
2.18	EFFECT OF THE FOCUSING FIELD INDUCTION ON THE KLINOTRON AMPLIFIER CHARACTERISTICS	Odarenko E. N. Svich V. A. Smat'ko A. A.	Kharkov National University of Radioelectronics, Kharkov National University	Kharkov	Ukraine	199
2.19	PHYSICAL NATURE OF THE SMITH-PURCELL EFFECT AND ITS SIMULATION	Odarenko E. N. Shmat'ko A. A. Udintcev P. V.	Kharkov National University by V. N. Karazin	Kharkov	Ukraine	200
2.20	ELECTRODYNAMIC CHARACTERISTICS OF RADIATING SYSTEMS IN ELECTRONIC DIFFRACTION DEVICES	Vorobyov G. S. Petrovsky M. V. Krutko Y. A., Rybalko A. A. Shulga Y. V.	Sumy State University	Sumy	Ukraine	275
2.21	THE THEORY OF CLINOTRON WITH NON-FIXED LONGITUDINAL STRUCTURE OF RF FIELD	Makhalov P. B. Fedotov A. E.	Institute of Applied Physics RAS	Nizhny Novgorod	Russia	226

SESSION 2/3: M-TYPE DEVICES & GYRODEVICES

**SevNTU (Studgorodok)
aud. 304 (library)**

MONDAY, 16.15-18.00

Co-Chairmen:
SHEIN A. G., Professor
Volgograd State Technical University, Russia
A. V. GALDETSKY, C.Sc.
FSUE "SPC Istok", Moscow, Russia

2.22	PHASE PORTRAIT OF BUNCHED BEAM UNDER PROFILING GUIDING MAGNETIC FIELD AT COAXIAL GYRO-BWO	Khoruzhiy V. M.	National Science Center "Kharkov Institute of Physics and Technology"	Kharkov	Ukraine	046
2.23	INVESTIGATION OF EXCITATION OF MULTIFREQUENCY SIGNAL IN AMPLITRON	Chikov I. S. Shein A. G.	The Volgograd State Technical University	Volgograd	Russia	135
2.24	COMBINATIONAL FREQUENCIES EXCITATION IN DEMATRON	Yeskin D. L. Shein A. G.	Volgograd State Technical University	Volgograd	Russia	310
2.25	THE PATHS OF IMPROVEMENT OF SECONDARY-EMISSION MULTIPLICATION IN COLD-CATHODE MAGNETRON TUBES	Churyumov G. I. Starchevskiy Yu. L.	Kharkov National University of Radio Electronics	Kharkov	Ukraine	366
2.26	QUALITATIVE ANALYSIS OF FORMING OF ELECTRON FLOW ON EDGE OF ANODE VOLTAGE PULSE IN COLD-CATHODE MAGNETRON	Churyumov G. I. Sivokon' K. V.	Kharkov National University of Radio Electronics	Kharkov	Ukraine	367

2.27	STABILITY AND PERIODICAL MOTION OF CHARGED PARTICLES IN CROSSED-FIELD SYSTEMS	Nikitenko O. M. Volovenko M. V.	Kharkiv National University of Radio-electronics	Kharkiv	Ukraine	202
2.28	EVALUATION OF RISING-SUN MAGNETRON COMPETITION ABILITY	Gurko A. A. Yeryomka V. D. Polyakov Yu. V.	Usikov Institute for Radiophysics and Electronics of NASU, Joint Stock Company «Pluton»	Moscow Kharkov	Russia Ukraine	373
2.29	COMPETITION OF MODES IN A RISING-SUN MAGNETRON	Gurko A. A. Yeryomka V. D. Polyakov Yu. V.	Usikov Institute for Radiophysics and Electronics of National Academy of Sciences of Ukraine Joint Stock Company «Pluton»	Moscow Kharkov	Russia Ukraine	374
2.30	FIELD EMISSION SYSTEM FOR COLD-CATHODE MAGNETRON "FIRING"	Yeryomka D. V.	Kharkiv National University	Kharkov	Ukraine	375
2.31	COLD CATHODE EMISSION IN A MAGNETRON DIODE	Kopot' M. A. Yeryomka V. D.	National University of Radioelectronics Usikov Institute for radiophysics and Electronics of NASU	Kharkov	Ukraine	376
2.32	ON THE INFLUENCE OF ANODE VOLTAGE PULSE IN COLD-CATHODE MAGNETRON TRIGGERING	Yeryomka V. D. Kopot' M. A. Naumenko V. D.	Usikov Institute for Radiophysics and Electronics of NASU, National University of Radioelectronics Radioastronomy Institute NASU	Kharkov	Ukraine	405

SESSION 3/1: BROADBAND WIRELESS ACCESS SYSTEMS

**SevNTU (Studgorodok)
aud. 310 (library)**

MONDAY, 11.00-13.00

Co-Chairmen:

M. Ye. ILCHENKO, Corresponding Member of NASU, Professor
National Technical University of Ukraine "KPI", Kiev

K. S. SUNDUCHKOV, Professor
ITS of National Technical University of Ukraine "KPI", Kiev

INV.7	REQUIREMENTS FOR INTERACTIVE HETEROGENEOUS TELECOMMUNICATION 4G NETWORK RESOURCE FOR MOBILE SUBSCRIBERS	Ilchenko M. E. Sunduchkov K. S. Volkov S. E. Sunduchkov I. K.	Institute of Telecommunication Systems NTUU "KPI", OAU SPF "Saturn"	Kiev	Ukraine	297
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3.1	TRENDS OF DEVELOPMENT OF TELECOMMUNICATION BROADBAND RADIOACCESS SYSTEMS OF A LONG-WAVE PART OF A MILLIMETER BAND	Kravchuk S. A.	Research Institute of Kiev Telecommunications NTUU «KPI»	Ukraine	053
3.2	BROADBAND MULTIMEDIA NETWORK ON THE BASE OF THE TD-CDMA WIRELESS EQUIPMENT	Kravchuk S. A. Kaydenko N. N.	Research Institute of Kiev Telecommunications NTUU «KPI»	Ukraine	038
3.3	OFDM SIGNAL BEHAVIOUR FOR MICROCELL AND CELL RADIO SYSTEMS OF MILLIMETER-WAVE BAND MOBILE COMMUNICATION	Kravchuk S. A.	Research Institute of Kiev Telecommunications NTUU «KPI»	Ukraine	037
3.4	SOME CHARACTERISTICS OF 4G COMMUNICATION NETWORKS	Lomaka L. V Shelkovnikov B. N. Lomaka V. L	National Technical Institute of Ukraine «Kiev Polytechnic University»	Kiev	Ukraine 379
3.5	SYSTEM MODELLING OF SATELLITE COMMUNICATION SYSTEM TRANSCEIVERS IN MM RANGE	Iashchuk A. Shelkovnykov B.	NTUU «KPI» Institute of Telecommunication Systems	Kiev	Ukraine 328
3.6	MULTIMEDIA DATA TRANSMISSION SYSTEM FOR 10.15-12.50 GHz BAND	Sviridenko V. I. Belonozhko M. A. Sologub V. V. Konoh I. F. Polyakov S. V. Gorbanov N. A. Makeenko I. V. Perkova N. I.	Betatvcom Ltd.	Donetsk	Ukraine 293
3.7	MICROWAVE TELECOMMUNICATION SYSTEM WITH INCREASED SPECTRAL EFFICIENCY	Ilchenko M. Ye. Narytnik T. N. Voytenko A. G. Volkov V. V. Ksyonzenko P. Ya. Khimich P. V. Shevchenko A. S.	NTUU «KPI» Institute of Electronics and Communication, UASSP Odessa Regional Broadcasting Center ROKS Co. Military Institute of Telecommunications & Informatization at NTUU «KPI»	Kiev Odessa	Ukraine 098
3.8	SPACE-TIME RADIO RECEPTION AS THE SYSTEM OF MASS SERVICE	Marigodov V. K.	Sevastopol National Technical University	Sevastopol	Ukraine 081
3.9	TELEVISION IMAGE PROCESSING BY MEANS OF SPATIAL FILTRATION AND FILTRATION IN FREQUENCY DOMAIN USING MATLAB	Mickhayluck Y. P. Nacharov D. V.	Sevastopol National Technical University	Sevastopol	Ukraine 195

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3.10p	INTEGRATED FORMER OF HIGH-SPEED DATA TRAFFIC AND TV FOR RADIO LINKS DIGITAL UPDATING	Ilchenko M. Ye. Narytnik T. N. Voytenko A. G. Volkov V. V. Simonov A. A. Shevchenko A. S.	NTUU "KPI" Institute of Electronics and Communication, UASSP Odessa Regional Broadcasting Center Concern RRT Military Institute of Telecommunications & Informatization at NTUU "KPI"	Kiev Odessa	Ukraine	103
3.11p	THE ANALYSIS OF MEANS OF CONTENT DELIVERY TO TRANSMITTERS OF MONOFREQUENT DVB-T NETWORK OF UKRAINE	Ilchenko M. Y. Kazimirenko V. Ya. Naritnik T. N.	NTUU "KPI" Institute of Telecommunications	Kiev	Ukraine	097
3.12p	PROBLEMS OF THE MULTIPositioned SIGNAL OPTIMAL RECEIVING IN CDMA SYSTEMS	Sunduchkov A. K.	Globallogic, 86D	Kiev	Ukraine	377
3.13p	LINEARIZATION OF POWER AMPLIFIERS BY BASEBAND DIGITAL PREDISTORTION FOR OFDM TRANSMITTERS	Bondar D. Budimir D. Shelkovnikov B.	University of Westminster NTUU "KPI"	London Kiev	UK Ukraine	315
3.14p	MINIMIZING MEMORY EFFECTS IN OFDM TRANSMITTERS USING ADAPTIVE BASEBAND EQUALIZATION	Bondar D. Budimir D. Shelkovnikov B.	University of Westminster NTUU "KPI"	London Kiev	UK Ukraine	317

SESSION 3/2: SUPERWIDEBAND RADIO SYSTEMS

**SevNTU (Studgorodok)
aud. 310 (library)**

MONDAY, 14.00-16.00

Co-Chairmen:

S. G. BUNIN, Professor

SRI of Telecommunications, NTUU "KPI", Kiev, Ukraine

Ye. A. YAKORNOV, Professor

SRI of Telecommunications, NTUU "KPI", Kiev, Ukraine

INV.8	DESIGN OF ADAPTIVE WIRELESS NETWORKS FOR DYNAMICALLY CHANGING SITUATIONS	Botsman I. V.	"S&T Soft-Tronik" 11a, Kudryavskaya Str., Kyiv, 04056, Ukraine,	Kiev	Ukraine	300
3.15	INFLUENCE OF PACKAGE SIZE ON EFFICIENCY OF PACKAGE RADIO NETWORK MAC LEVEL	Bunin S. G. Voiter A. P.	Institute of Telecommunications NTUU "KPI"	Kiev	Ukraine	095
3.16	UWB WIRELESS COMMUNICATIONS WITH SIGNAL CORRELATION PROCESSING	Kalinin V. I. Chapursky V. V.	Kotelnikov Institute Radio Engineering and Electronics of RAS, Fryazino branch	Fryazino Moscow	Russia	108

3.17	ABOUT CONSTRUCTIVE INFLUENCE OF NOISE ON SECURE COMMUNICATION	Koronovskii A. A. Moskalenko O. I. Hramov A. E.	Saratov State University	Saratov	Russia	058
3.18	INCREASING OF WORKING FREQUENCIES ENGAGEMENT RATIO IN SUPERWIDEBAND SYSTEMS	Pushkarev V.P. Titov A.A. Urchenko V.I.	Federal Research Institute of semiconductor Devices	Tomsk	Russia	248
3.19	DIAGNOSING OF ELEMENTS IN NGN COMMUNICATION NETWORKS	Tsurcanu D. N. Nistiriuk P. V. Alexei A. S. Beregoi E. A. Tsurcanu A. G. Tsurcanu T. P., Finciuk S. I. Lukin T. T.	Technical University of Moldova	Kishinev	Moldova	144
3.20	SIGNALS SPACE-TIME PROCESSING METHODS WITH FOUR-DIMENSIONAL MATRICES USING	Avdeyenko G. L. Gelesev A. I. Yakovnov E. A.	National Technical University of Ukraine "KPI"	Kiev	Russia	152
3.21	PRINCIPLES OF FORMING DWDM SYSTEMS ON THE BASIS OF FEMTOSECOND LASER RADIATION	Machekhin Y. P. Voznuk E. I.	Kharkov National University of Radio Electronics	Kharkov	Ukraine	390
3.22	SIMULATION OF TRANSCIEVER AS A PART OF A COMPLEX SYSTEM – THE SPACEBORNE SAR GROUND TEST WORKBENCH	Lepehina T. A. Nikolaev V. I. Semenov M. A.	ELSOV Research and Production Centre	Moscow-Zelenograd	Russia	271
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3.23p	MINIMIZING THE NUMBER OF CONTROL POINTS FOR DIAGNOSING ELEMENTS OF MPLS NETWORK (UNIFLUX-LINE (MOLDOVA))	Tsurcanu D. N.	Technical University of Moldova	Kishinev	Moldova	154
3.24p	TIMING FOR MOBILE NETWORK COMMUNICATION ON LAYER ARCHITECTURE	Vakas V. I. Kalenik I. E. Chernyak I. P.	PJS "Kyivstar GSM" Technical Directorate, Ukrainian State Centre of Radio Frequencies (UCRF), PJS "Kyivstar GSM" Technical Directorate	Kiev	Ukraine	207
3.25p	SPECIFICITY OF SIGNALS RECEPTION IN DIGITAL RADIO CHANNELS OF THE MILLIMETRIC WAVE BAND	Bobrov I. N. Pizuyuk D. L.	UKRKOSMOS State Firm	Kiev	Ukraine	127
3.26p	INFORMATION SAFETY IN TELECOMMUNICATION NETWORKS OF NATIONAL SATELLITE COMMUNICATION SYSTEM	Gorbach I. V. Duma M. G.	SE "Ukrkosmos"	Kiev	Ukraine	187
3.27p	APPROXIMATION BENDING AROUND POWER SPECTRUM OF A SPEECH SIGNAL	Bykov A. A. Kropotov Y. A.	Murom Institute of Vladimir State University	Murom	Russia	371

3.28p	RESEARCH OF METHODS OF THE SPECTRAL ANALYSIS OF SPEECH SIGNALS	Bykov A. A. Kropotov Y. A. Proskuryakov A. Y.	Murom Institute of Vladimir State University	Murom	Russia	372
3.29p	INCREASING THE NUMBER OF USERS IN MULTI-CARRIER CDMA SYSTEM	Ladik A. I. Nyzhnyk D. Y.	NTUU "KPI" Institute of the telecommunication systems	Kiev	Ukraine	341

SESSION 3/3: TELECOMMUNICATION SYSTEMS' MEANS

**SevNTU (Studgorodok)
aud. 310 (library)**

MONDAY, 16.15-18.00

Co-Chairmen:

A. A. LIPATOV, Professor

Scientific Center at Kiev Military Institute of Communications & Control, Ukraine

M. A. KOLOMYTSEV, C.Sc.

Scientific Center at Kiev Military Institute of Communications & Control, Ukraine

INV.9	PLANNING ALGORITHM FOR SYNCHRONOUS NETWORK OF DIGITAL TELEVISION	Kolomytsev M. A. Lipatov A. A.	Institute of Telecommunication Systems NTUU "KPI", SCCI MITI NTUU	Kiev	Ukraine	212
3.30	COMPARISON OF ESTIMATION METHODS OF ELECTROMAGNETIC COMPATIBILITY ON THE CRITERION OF OUTAGE TIME PERCENTAGE VS. INTERFERENCES	Mishura T. V. Kolomytsev M. A.	Institute of Telecommunication Systems NTUU "KPI"	Kiev	Ukraine	314
3.31	SIGNAL SHAPER OF DVB-T SINGLE FREQUENCY NETWORK	Britkov A. V. Nosov O. S. Dementenko S. A. Kondratenko G. G. Strybizh I. S. Belikov I. A.	Betatvcom Ltd.	Donetsk	Ukraine	289
3.32	TV TRANSMITTER OF UHF RANGE WITH 1kW OUTPUT POWER	Laktionov A. I. Tarasov M. A. Zayanchukovsky V. V. Vinkis I. T. Gorbanov N. A. Bulgakov V. A. Torubarov Y. V.	Betatvcom Ltd.	Donetsk	Ukraine	291
3.33	A MOBILE KU-BAND EARTH STATION: CHARACTERISTICS AND CAPABILITIES	Lepehina T. A. Nikolaev V. I.	ELSOV Research and Production centre	Moscow Zelenograd	Russia	263
3.34	SATCOM DATA PROCESSOR	Tyurin M. A. Davidoff R. V.	Research and production centre ELSOV	Moscow, Zelenograd	Russia	083
3.35	SPECIAL FEATURES OF AUTOMATIC ANTENNA POINTING IN THE MOBILE EARTH STATION	Lepehina T. A. Nikolaev V. I.	ELSOV Research and Production Centre	Moscow Zelenograd	Russia	279

3.36	PHASE-SHIFT KEYING SIGNALS ON DIRECT DIGITAL SYNTHESIS SYNTHESIZERS BASIS MODULATOR	Savochkin A. A. Mickhayluck Y. P. Iskiv V. M. Schekaturin A. A.	Sevastopol National Technical University stopol	Ukraine	305
3.37	THE PRINCIPLES AND IMPLEMENTATION OF THE BROADCASTING DIGITAL TV SYSTEMS OVER IPTV	Cherevatenko A. A. Borodina G. N. Makeyenko I. V.	Betatvcom Ltd.	Donetsk	Ukraine 346
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3.38p	TRANSMITTING DEVICE OF GROUP SIGNAL OF 10.5-10.65 GHz RANGE WITH HIGH LINEARITY	Belonozhko M. A. Omelchenko A. A. Zayanchukovsky V. V. Makeenko I. V. Perkova N. I.	Betatvcom Ltd.	Donetsk	Ukraine 288
3.39p	DIFFERENTIAL DETERMINATION OF DIFFERENCES FOR PHASES IN MICROWAVE PHASE SYSTEMS USING PHENOMENA OF FRONT CURVATURE OF ELECTROMAGNETIC WAVES	Avdeyenko G. L. Veselova A. P. Voytko Y. N. Mazurenko A. V. Yakornov E. A.	National Technical University of Ukraine «KPI»	Kiev	Ukraine 079
3.40p	METHOD OF INITIAL DATA CALCULATION FOR TECHNICAL AND ECONOMIC OPTIMIZATION OF EARTH STATIONS OF SATELLITE COMMUNICATION	Bobrov I. N. Valuyskiy S. V.	Institute of Telecommunication Systems at NTUU "KPI"	Kiev	Ukraine 043
3.41p	TECHNICAL AND ECONOMIC OPTIMIZATION OF TRANSCIEVER SYSTEM OF EARTH STATION OF SATELLITE VSAT NETWORK	Bobrov I. N. Valuyskiy S. V.	Institute of telecommunication systems at NTUU "KPI"	Kiev	Ukraine 044
3.42p	TRANSCIEVER FOR HALF-DUPLEX COMMUNICATIONS	Dudnik K. V. Sviridenko V. I. Borodina G. N. Gorbanov N. A.	Betatvcom Ltd.	Donetsk	Ukraine 290
3.43p	DIGITAL RRL OF UHF-RANGE	Tatarinsky S. N. Mizonov P. E. Trembach D. N. Gorbanov N. A. Makeenko I. V. Borodina G. N.	Betatvcom Ltd.	Donetsk	Ukraine 292
3.44p	THE OFDM USE FOR THE FIGHT AGAINST THE FREQUENCY-SELECTIVE FADING IN RADIO-RELAY LINKS	Dovgun O. O. Kolomytsev M. A.	Institute of Telecommunication Systems NTUU	Kiev	Ukraine 347
3.45p	MATHEMATICAL MODEL OF MOBILE COMMUNICATION NETWORK TRAFFIC	Bezruk V. M. Korsun I. V.	Kharkov National University of Radio Electronics	Kharkov	Ukraine 358

SESSION 7/1: CHANGING PARAMETERS OF MICROWAVE DEVICES & SIGNALS

**SevNTU (Studgorodok)
aud. 206 (library)**

MONDAY, 11.00-13.00

Co-Chairmen:

Yu. B. GIMPILEVICH, Professor
Sevastopol National Technical University, Ukraine
I. L. AFONIN, D.Sc.
Sevastopol National Technical University, Ukraine

7.1	METROLOGICAL CHARACTERISTICS OF THE FREQUENCY METER SCALE USING THE METHOD OF COINCIDENCE	Trotsishin I. V. Voytyuk O. P. Trotsishina I. V.	The Khmel'nitskiy National University	Khmel-nitsskiy	Ukraine	239
7.2	MAGNETORESISTIVE MEASURING CONVERTER OF ACTIVE POWER	Vountesmeri V. S. Smolianinov V. G. Vytiaganets A. I.	National Technical University of Ukraine "KPI"	Kiev	Ukraine	301
7.3	RESONATOR Q-FACTOR MEASUREMENT UNDER CONDITIONS OF MODE DEGENERATION REMOVAL	Glamazdin V. V. Skresanov V. N.	Usikov Institute of Radio Physics and Electronics NASU	Kharkov	Ukraine	088
7.4	COMPUTER MICROWAVE DIAGNOSTIC SYSTEM FOR MEASUREMENT OF PARAMETERS OF SANDWICH-LIKE MICRO- AND NANOSTRUCTURES	Usanov D. A. Skripal A. V. Abramov A. V. Bogolubov A. S.	Saratov State University by N. G. Chernyshevsky	Saratov	Russia	090
7.5	PHASE NOISE CHARACTERISTICS OF MSSW TUNABLE OSCILLATORS	Yakovlev S. V. Petrov V. V.	S.P.A. FERRITE	Saint-Petersburg	Russia	121
7.6	RESEARCH OF FOUR-DETECTOR SLOTTED-GUIDE MICROWAVE CONVERTER OF CALIBRATING REFLECTION MEASURING SET	Lashchenko I. V. Noskovich V. I. Ovcharov P. P.	Sevastopol National Technical University stopol 33, Universitetskaya Str., Sevastopol		Ukraine	167
7.7	MULTI-OCTAVE PASSIVE DEVICES OF POWER DIVISION FOR NETWORK MEASUREMENTS OF THE RANGE UP TO 20 GHz	Andronov E. V. Goshin G. G. Fateyev A. V.	Tomsk State University of Control Systems and Radioelectronics, MICRAN Co.	Tomsk	Russia	174
7.8	AUTOMATED MILLIMETER BAND SPECTROMETER FOR SCANNING ESR-MICROSCOPE WITH LOCALIZED MAGNETIC FIELD	Varavin A. V. Ermak G. P. Popov I. V. Tarapov S. I.	Usikov Institute for Radiophysics and Electronics NAS of Ukraine	Kharkov	Ukraine	209
7.9	IDENTIFICATION OF SENSOR TRANSFORMATION COEFFICIENT OF MULTIPROBE MICROWAVE MULTIMETER	Volkov V. M. Zaichenko O. B.	Kharkov National University of Radioelectronics	Kharkov	Ukraine	220
7.10	MEASURING PARAMETERS OF PHYSICAL MODELS OF MULTIELECTRODE SEMICONDUCTOR STRUCTURES	Lyshynskaya L. B. Shvedyuk A. H. Filinyuk N. A.	Vinnitsa National Technical University	Vinnitsa	Ukraine	055

poster papers

7.11p	PROCEDURE AND TEST-FIXTURES FOR MEASUREMENTS OF Q-FACTOR AND CAPACITANCE FOR DIFFERENT TYPE OF VARACTORS ON MICROWAVE	Kosmin D. M. Osadchy V. N. Kozyrev A. B.	St. Petersburg State Electrotechnical University (LETI)	Saint Petersburg	Russia	155
7.12p	EXPERIMENTAL RESEARCH OF FIELD STRUCTURE IN MICROSTRIP LINE USING THE METHOD OF MAGNETIC PROBE ON THE BASIS OF FERROMAGNETIC RESONANCE	Vountesmyr V. S. Komarova O. P. Osipov A. N.	Department of Radioengineering, National Technical University of Ukraine "Kiev Polytechnic Institute"	Kiev	Ukraine	267
7.13p	FREQUENCY-MODULATED OSCILLATIONS-BASED MEASUREMENT OF A ESONATOR QUALITY FACTOR	Sovlukov A. S. Fateev V. Y.	Institute of Control Sciences	Moscow	Russia	060
7.14p	THE METHOD FOR EXCLUDING AMBIGUITIES IN PHASE SHIFTS SAMPLING AT THE MEASUREMENT OF REFLECTIVITY MODULE	Trushkin A. N.	Sevastopol National Technical University	Sevastopol	Ukraine	302
7.15p	METHOD FOR MEASUREMENT OF OSCILLATING SYSTEM'S RESONANT FREQUENCY AND ITS REALIZATION	Azmaiparashvili Z. A.	Institute of Control Sciences	Moscow	Russia	324

SESSION 7/2: MICROWAVE MEASUREMENTS IN MICROELECTRONICS

**SevNTU (Studgorodok)
aud. 206 (library)**

MONDAY, 14.00-16.00

Co-Chairmen:

V. A. USIN, Professor

Kharkov National University of Radioelectronics, Ukraine

V. F. MANOYLOV, Professor

Zhitomir State University of Technology, Ukraine

7.16	ON THE POSSIBILITIES OF AUTOMATIC MEASUREMENTS OF MICROWAVE PARAMETERS OF MMIC ON WAFER IN ISTOK	Galdetskiy A. V. Buvailyk E. V. Vasiliev V. I. Korolev A. N.	FSUE "Istok"	Fryazino	Russia	378
7.17	RETRANSMITTER METER SIGNAL DELAY DEPENDENCE ON THE DIAMETER OF THE REFLECTOR IN FRESNEL ZONE	Velichko D. A. Velichko S. A.	A. Y. Usikov Institute of Radiophysics and Electronics NAS of Ukraine	Kharkov	Ukraine	257

7.18	MEASURING INFORMATION SIGNALS IN MICROWAVE MICRO- AND NANODIAGNOSTICS OF SEMICONDUCTOR MATERIALS AND STRUCTURES	Gordienko Y. E. Petrov V. V. Slipchenko N. I.	Kharkiv National University of Radio-electronics	Kharkov	Ukraine	232
7.19	INVESTIGATION INTO ABSORBING PROPERTIES OF ANECHOIC CHAMBER IN MICROWAVE RANGE	Ovsyanikov V. V. Makarov O. L. Ol'shevs'kiy O. L. Popel' V. M. Romanenko Y. D.	Dnepropetrovsk National University, Yuzhnoe State Design Office	Dnepropetrovsk	Ukraine	009
7.20	MEASURING-MODELLING COMPLEXES FOR ALIGNMENT AND ANTENNAS MEASUREMENTS	Usin V. A. Markov V. I. Pomazanov S. V. Usina A. V.	Kharkov National University of Radio Electronics The Research and Development Centre of Radio Engineering and Optic-Electronic Systems "Obriy"	Kharkov Snovjanka Torez Kharkov	Ukraine	193
7.21	HIGH Q-QUALITY RESONANCES IN THE "PIN WITH THE GAP AND THE SHORT" SYSTEMS	Usanov D. A. Gorbatov S. S. Sorokin A. N. Kvasko V. Yu.	Saratov State University	Saratov	Russia	092
7.22	MICROWAVE REFLECTION FROM THE LOW DIMENSIONAL RESONATOR OF "THE CAPACITOR DIAPHRAGM – THE SHORT CIRCUITING PISTON" TYPE	Usanov D. A. Gorbatov S. S. Sorokin A. N.	The Saratov State University 83 Astrakhanskaya Str., Saratov	Saratov	Russia	093
7.23	CONTROLLED STRUCTURES ON THE BASIS OF DISK DIELECTRIC RESONATORS IN A MILLIMETER WAVE RANGE	Derkach V. N. Golovashchenko R. V. Goroshko E. V.	Usikov Institute of Radiophysics and Electronics of NASU	Kharkov	Ukraine	105
7.24	EXPERIMENTAL INVESTIGATIONS OF FLAT REFLECTOR INFLUENCE ON THE SIGNAL IN FRESHNEL ZONE	Roenko A. N. Velichko D. A. Velichko D. A. Levantovsky V. Yu. Odnovolik E. V.	Usikov Institute of Radiophysics and Electronics NAS of Ukraine	Kharkov	Ukraine	244
7.25	THE EFFECT OF THE RETRANSMITTER CHANNEL PHASE CHARACTERISTICS ON THE SIGNAL DELAY IN RANGE METERS	Velichko D. A. Velichko S. A.	A. Y. Usikov Institute of Radiophysics and Electronics NAS of Ukraine	Kharkov	Ukraine	256
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7.26p	PROPAGATION OF MICROWAVE SIGNALS ALONG A TWO- WIRE LINE WITH A LASER FILAMENT FOR A CONDUCTOR	Bogatov N. A., Kuznetsov A. I. Smirnov A. I. Stepanov A. N.	Institute of Applied Physics Russian Academy of Sciences	Nizhny Novgorod	Russia	051

SESSION 7/3: MATERIALS MEASUREMENT

**SevNTU (Studgorodok)
aud. 206 (library)**

MONDAY, 16.15-18.00

Co-Chairmen:

A. F. YANENKO, Professor

National Technical University of Ukraine "KPI", Kiev

V. V. SALAMATIN, C.Sc.

Sevastopol National Technical University, Ukraine

7.27	DIRECT MEASUREMENT METHOD FOR REFRACTION INDEX OF LIQUIDS IN Q-BAND	Golubnichaya G. V. Kirichenko A. Ya.	Usikov Institute of Radiophysics and Electronics National Academy of Sciences of Ukraine	Kharkov	Ukraine	047
7.28	MEASUREMENT OF UHF-PERMITTIVITY OF LIQUID CRYSTALS IN POROUS SILICON	Drokin N. A. Timashov V. A. Uzova V. A.	L. V. Kirensky Institute of Physics Siberian Federal University	Krasnoyarsk	Russia	056
7.29	THE METHOD OF THEORETICAL CALIBRATION OF TRANSIENT PROCESS BY ELECTROMAGNETIC FIELD IN RESONATOR SORPTION MOISTURE METER	Panchenko A. Yu. Lovin M. S.	Kharkov National University of Radioelectronics	Kharkov	Ukraine	321
7.30	MEASUREMENT COMPLEX PERMITTIVITY OF HIGH LOSS USING RESONATOR WITH RING CAVITY	Eremenko Z. E. Ganapolskii E. M. Scresanov V. N. Vasilchenko V. V.	Usikov Institute for Radiophysics and Electronics of NASU	Kharkov	Ukraine	073
7.31	DIFFERENTIAL DIELECTROMETER FOR THE SMALL CHANGE MEASUREMENT OF COMPLEX PERMITTIVITY OF HIGH LOSS LIQUIDS	Ganapolskii E. M. Eremenko Z. E. Scresanov V. N.	Usikov Institute for Radiophysics and Electronics of NASU	Kharkov	Ukraine	074
7.32	THE METHOD OF MEASUREMENTS AND DIELECTRIC PARAMETERS OF THE FILM MATERIALS AT MM-WAVE RANGE	Parshin V. V. Serov E. A.	Institute of Applied Physics RAS	Nizhny Novgorod	Russia	246
7.33	DIELECTRIC RESONATORS FOR DETERMINATION OF MATERIALS ELECTROPHYSICAL PARAMETERS	Filipov Yu. F. Prokopenko Yu. V. Shipilova I. A.	Usikov Institute of Radiophysics and Electronics of NASU	Kharkov	Ukraine	166
7.34	THE LAPSE ANALYSIS OF WAVEGUIDE METER OF ELECTROMAGNETIC MATERIALS PARAMETERS	Salamatin V. V. Lemeshko G. V.	Sevastopol National Technical University Studgorodok, Sevastopol		Ukraine	229
7.35	THE EFFECT OF TEMPERATURE UPON REFLECTION OF A MAGNETIC FLUID IN THE HIGH FREQUENCY RANGE	Usanov D. A. Skripal A. V. Skripal An. V. Postelga A. E.	The Saratov State University by N. G. Chernyshevsky	Saratov	Russia	237

7.36	RESONANT METHOD FOR MEASUREMENT OF COMPLEX PERMITTIVITY OF WINE	Kirichenko A. Ya. Krivenko H. V. Lutsenko V. I. Golubnichaya G. V. Zhilyakova T. A.	Usikov Institute of Radiophysics and Electronics NASU, National Institute of Grape and Vine "Magarach" UAAN	Kharkov Yalta	Ukraine	241
poster papers						
7.37p	DETERMINATION OF ELECTROMAGNETIC PROPERTIES OF METAMATERIALS WITH OPEN-ENDED COAXIAL LINES	Ivanov V. K. Silin O. O. Stadnyk O. M.	Institute of Radiophysics and Electronics, NASU	Kharkov	Ukraine	066
7.38p	APPLICATION OF MICROSTRIP PHOTONIC CRYSTALS TO MEASUREMENT OF PARAMETERS OF MATERIALS	Usanov D. A. Skripal A. V. Abramov A. V. Bogolubov A. S. Kulikov M. Yu.	Saratov State University by N.G. Chernyshevsky	Saratov	Russia	091
7.39p	MEASUREMENT OF DIELECTRIC SUBSTANCE CHARACTERISTICS BY PROBE METHOD OF COMPARISON	Esaulkov D. O. Lukashev A. A. Prokopenko A. V.	Moscow Engineering Physics Institute (State University)	Moscow	Russia	252
7.40p	MICROWAVE COMPLEX FOR MEASUREMENT OF ANISOTROPIC DIELECTRIC PARAMETERS	Strizhachenko A. V. Chizhov V. V. Ivanov A. I. Andreyev V. B. Zvyagintsev A. A.	Kharkov Karazin National University	Kharkov	Ukraine	278

TUESDAY, 9 SEPTEMBER

SESSION 4/1: ANTENNA ARRAYS

**SevNTU (Studgorodok)
aud. Festo**

TUESDAY, 8.30-10.30

Co-Chairmen:

D. I. VOSKRESENSKY, Professor

Moscow Aviation Institute (Technical University), Russia

A. N. BRATCHIKOV, Professor

Moscow Aviation Institute (Technical University), Russia

4.1	ACTIVE PHASED ARRAY WITH WIDE ANGLE SCANNING	Ovchinnikova E. V.	Moscow State Aviation Institute (Technical University) MAI	Moscow	Russia	387
4.2	RECEIVING MULTIBEAM DIGITAL ANTENNA ARRAYS DESIGN	Voskresensky D. I. Dobychina E. M.	Moscow State Aviation Institute (technical university) MAI	Moscow	Russia	351
4.3	SYNTHESIS OF FUNCTIONAL SCHEMES OF THE RECEIVER ACTIVE PAA	Gostuykhin V. L. Trusov V. N. Gostuykhin A. V.	Moscow Aviation Institute (State Technical University)	Moscow	Russia	385

4.4	MODEL OF QUASIOPTICAL DIRECTIVITY PROPERTIES OF ANTENNA ARRAYS IN FRESNEL ZONE	Mazurenko A. V. Yakovnov E. A.	National Technical University of Ukraine "KPI", Institute of the Telecommunication Systems	Kiev	Ukraine	273
4.5	PARAMETRIC OPTIMIZATION AND GROUNDS OF CHOOSING FEELD PATTERN FOR ANTENNA SYSTEMS FOR BASE STATION OF MOBILE COMMUNICATION	S. G. Kondrateva P. A. Shmachilin	Moscow Aviation Institute (State University of Aerospace Technologies)	Moscow	Russia	388
4.6	RADIATION OF UWB PULSES BY ANTENNA ARRAY SYSTEMS WITH INTERACTIVE ELEMENTS	Lagovsky B. A.	Moscow Institute of Electronic Engineering	Moscow	Russia	138
4.7	METHODS OF WAVEGUIDE-DIELECTRIC RADIATORS FOR PHASED ANTENNA ARRAYS DEVELOPMENT AND RESEARCH	Rusov Yu. S. Kostina N. Yu. Krekhtunov V. M.	Bauman Moscow State Technical University	Moscow	Russia	350
4.8	ANTENNAS FOR NEW COMMUNICATION SYSTEM	Tay Zar Oo	Moscow State Aviation Institute (technical university)	Moscow	Russia	389
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4.9p	DESIGNING OF PRINTED REFLECTARRAY WITH THE USE OF PHASE SYNTHESIS	Ballandovich S. V. Kostikov G. A. Sugak M. I.	St.-Petersburg Electrotechnical University	St.-Petersburg	Russia	224
4.10p	INACCURACY ESTIMATION OF MICROWAVE MICROSTRIP REFLECT ARRAY IMPLEMENTATION	Salomatov Y. P. Polenga S. V. Ryazantsev R. O. Bashkatov E. S.	Siberian Federal University Krasnoyarsk	Krasnoyarsk	Russia	125
4.11p	MODELLING OF SAR TRANSCEIVER AS A COMPLEX SYSTEM	Stikhiy S. V. Chikachev V. S.	ELSOV Research&production centre	Moscow Zelenograd	Russia	277
4.12p	DESIGN OF MULTIELEMENT ANTENNAS WITH COMPLI-CATED FEEDING SYSTEMS	Bankov S. Ye. Davydov A. G. Kurushin A. A.	Kompas Co.	Moscow	Russia	020

SESSION 4/2: MICROWAVE ANTENNAS

**SevNTU (Studgorodok)
aud. Festo**

TUESDAY, 10.45-12.45

Co-Chairmen:

V. A. OBUKHOVETS, Professor

Taganrog Institute of Technology, Southern Federal University, Russia

F. F. DUBROVKA, Professor

National Technical University of Ukraine "KPI", Kiev

4.13	NEURAL-GENETIC METHOD APPLIED TO THE DESIGN OF VIVALDI ANTENNA	Dubrovka F. F. Vasylenko D. A.	National Technical University of Ukraine "KPI"	Kiev	Ukraine	313
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4.14	CORONATED ANTENNA FOR UHF BAND WITH CIRCULAR POLARIZED RADIATION	Mishoostin B. A. Slyozkin V. G.	Moscow Power Engineering Institute Sevastopol National Technical University	Moscow stopol	Russia Ukraine	215
4.15	ABOUT INPUT IMPEDANCE OF WIDEBAND FLAT AND FOLDED DIPOLES	Slyozkin V. G. Dvoryaninov G. V. Gnezdilov V. V.	Sevastopol National Technical University	stopol	Ukraine	217
4.16	THE MICROSTRIP ANTENNA	Katrich V. A. Mayboroda D. V. Pogarsky S. A. Saprykin I. I. Sukhov V. N.	Karazin Kharkov National University	Kharkov	Ukraine	149
4.17	MODELING OF MICROWAVE TELECOMMUNICATION DEVICES AND ANTENNAS BY VECTOR FINITE ELEMENT METHOD	Grigoryev A. D. Salimov R. V. Tilhonov R. I.	Saint-Petersburg State Electrotechnical University LG Russian R&D Center	St.-Petersburg	Russia	133
4.18	INFLUENCE OF A PULSE FIELD DESYNCHRONIZATION IN OUTPUT PLANE OF TEM HORN ANTENNA ON ITS ENERGETIC DIRECTIVITY FACTOR	Kostikov G. A. Odintsov A. Y. Sugak M. I.	The St.-Petersburg Electrotechnical University	St.-Petersburg	Russia	230
4.19	THE FRACTAL STRUCTURED LOG-PERIODICAL VIBRATOR ANTENNAS	Onufriyenko V. M.	National Technical University	Zaporizhzhya	Ukraine	265
4.20	INFLUENCE OF THE FIELD AMPLITUDE DISTRIBUTION IN THE ANTENNA APERTURE ON ITS STATISTICAL RADIATION CHARACTERISTICS	Lobkova L. M. Golovin V. V. Troitskiy A. V.	Sevastopol National Technical University	stopol	Ukraine	284
4.21	SPACE COHERENCE OF THE APERTURE ANTENNA RADIATION FIELD IN THE ENVIRONMENT WITH CASUAL HETEROGENEITIES	Lobkova L. M. Golovin V. V. Tyschuk Y. N.	Sevastopol National Technical University	stopol	Ukraine	285

poster papers

4.22p	ELECTRICALLY SMALL ANTENNAS FOR ROCKET-SPACE AND AVIATION TECHNICS	Ol'shevs'kiy A. L. Popel' V. M. Romanenko E. D. Bushans'ka V. V. Ovsyanikov V. V. Kolomoets A. V.	Yuzhnoe State Design Office named after M. K. Yangel, Dnepropetrovsk National University	Dnepropetrovsk	Ukraine	186
4.23p	DESIGN OF THE ULTRA-WIDEBAND 2,0 – 25,95 GHz TEST ANTENNA	Kasimenko V. B. Kopusov V. N. Gordeev A. N.	«MNIPI» Joint Stock Company	Minsk	Belarus	070
4.24p	SCATTERING AND ABSORBING OF ELECTROMAGNETIC RADIATION BY VERY THIN METAL WIRES	Kokodiy N. G. Gorobets N. N. Kiyko V. I. Kozlov I. I. Kuzmichov V. M. Balkashin V. P. Safronov B. V. Priz I. A.	Kharkov National University	Kharkov	Ukraine	245

SESSION 4/3: ANTENNA ELEMENTS & MICROWAVE DEVICES

**SevNTU (Studgorodok)
aud. Festo**

TUESDAY, 13.45-15.45

Co-Chairmen:

Ye. Ye. NECHAYEV, Professor

Moscow State Technical University of Civil Aviation, Russia

L. M. LOBKOVA, Professor

Sevastopol National Technical University, Ukraine

4.25	W-BAND HIGH POWER FERRITE PHASE SHIFTERS RESEARCH	Krekhtunov V. M. Golubtsov M. E. Ovechkin V. S. Komissarova E. V.	Bauman Moscow State Technical University	Moscow	Russia	349
4.26	SPATIAL DIAGRAM OF MICROWAVE RADIATION ACCOMPANYING THE MAGNETOSTATIC WAVES IN NON-UNIFORM MAGNETIZED FERRITE FILM PROPAGATION	Zubkov V. I. Shcheglov V. I.	Institute for Radio-engineering and Electronics RAS	Moscow	Russia	026
4.27	RESEARCH OF CIRCULAR DISC ULTRA WIDEBAND EMC MEASURING ANTENNA	Jinghui Qiu Lingling Zhong Bo Sun Zhang Ning	Harbin Institute of Technology	Harbin	China	086
4.28	NEW CONSTRUCTIONS OF POWER WAVEGUIDE SECTION ELEMENTS	Babushkina O. A. Golovkov A. A. Pipovarov I. U.	St.-Petersburg State Electrotechnical University (LETI)	St.-Petersburg	Russia	204
4.29	WIDEBAND THIN-SIDED RADIATING STRUCTURES	Mishoostin B. A. Slyozkin V. G.	Moscow Power Engineering Institute Sevastopol National Technical University	Moscow	Russia	216
4.30	THE LIMITS OF APPLICABILITY OF THE MODIFIED BASIS INDUCED MAGNETOMOTIVE FORCES IN THE SCATTERING PROBLEM AT LONGITUDINAL SLOT IN A WAVEGUIDE	Yatsuk L. P. Lyakhovsky A. A.	V. N. Karazin Kharkov National University	Kharkov	Ukraine	260
4.31	DETERMINATION OF WIDEBAND RIDGED HORN ANTENNA RIDGE PROFILE	Manoilov V. F. Pavluk V. V. Chuhov V. V.	Zhytomir Military Institute of National Aviation University	Zhytomir	Ukraine	084
4.32	AN ACTIVE TWO-ANTENNA OVER-REFLECTOR	Vichkan' A. V. Melyanovskiy P. A. Shut' A. I.	Usikov Institute of Radiophysics and Electronics NAS of Ukraine	Kharkov	Ukraine	130

SESSION 5a: SHF-DEVICES MATERIALS & TECHNOLOGY

**SevNTU (Studgorodok)
aud. Festo**

TUESDAY, 16.00-18.00

Co-Chairmen:

Yu. Ye. GORDIYENKO, Professor

Kharkov National University of Radioelectronics, Ukraine

A. I. DEMCHENKO, D,Sc.

Research and Production Corporation «Integral», Minsk, Belarus

5a.1	APPLICATION OF COMPLEX TECHNOLOGICAL OPTIMIZATION FOR MONOLITHIC MICROWAVE CIRCUITS DESIGNING	Gudkov A. G. Leushin V. Yu. Meshkov S. A. Popov V. V.	Hyperion Ltd. JSC, "Corporation "Vega", Moscow State Technical University n.a. N. E. Bauman, JSC «Svetlana»	Moscow, Russia Saint Petersburg	162
5a.2	NOVEL COMPACT SUB-STRATE INTEGRATED WAVEGUIDE RESONATORS AT 60 GHZ FOR LCP	Glubokov O. Budimir D. Shelkovnikov B.	University of Westminster NTUU "KPI"	London Kiev	UK Ukraine
5a.3	MICROWAVE METHODS OF FERROELECTRICS AND RELATED MATERIALS INVESTIGATION	Poplavko Y. Molchanov V. Pashkov V. Kazmirenko V.	National Technical University of Ukraine	Kiev	Ukraine 034
5a.4	CONTROL OF THE BANDWIDTH OF THE MICROWAVE PHOTONIC STRUCTURE IN FERROMAGNETIC RESONANCE REGION	Mozhyrovskiy N. V. Oliylyk V. V.	Taras Shevchenko Kiev National University	Kiev	Ukraine 266
5a.5	NONDESTRUCTIVE TECHNIQUE FOR MAGNETIC MATERIALS PARAMETERS' MEASUREMENTS	Zavislyak I. V. Popov M. A. Srinivasan G.	National Taras Shevchenko University Oakland University	Kyiv Rochester	Ukraine 172 USA
5a.6	IMPROVEMENT OF SPATIAL RESOLUTION OF SEMICONDUCTORS' MICROWAVE MICROSCOPY	Gordienko Yu. Ye. Melnik S. I. Slipchenko N. I. Ischenko A. L.	Kharkov National University of Radioelectronics	Kharkov	Ukraine 322
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5a.9	PROPERTIES AND TECHNOLOGY OF SPUTTERING OF YTTRIUM IRON GARNET FILMS FOR SPIN-WAVE ELECTRONICS	Nikolaychuk G. A. Yakovlev S. V. Lutsev L. V. Andreev A. N. Filimonov V. V.	Research Institute "Ferrite-Domen" Technical Institute	Saint Petersburg	Russia	181
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5a.11p	ABRASIVE AND EXTRUSION PROCESSING IN MANUFACTURE OF DETAILS FOR THE MICROWAVE DEVICES	Verba V. S. Gudkov A. G. Leushin V. Yu. Nazarov N. G. Silkin A. T.	JSC "Vega", Hyperion Ltd. Moscow State Technical University n.a. N. E. Bauman	Moscow	Russia	164
5a.12p	INDIVIDUAL RELIABILITY PREDICTION OF HETEROSTRUCTURE RTD AND DEVICES BASED UPON IT	Gudkov A. G. Leushin V. Yu. Ivanov Yu. A., Meshkov S. A. Khnykina S. V.	Hyperion Ltd., Moscow State Technical University n. a. N. E. Bauman	Moscow	Russia	163
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5a.14p	STUDY OF THE IMPROVEMENT OF THE AuGeNi OHMIC CONTACTS TO n-GaAs	Erofeev E. V. Kagadei V. A.	Research and Production Company "Micran" Research Institute of Semiconductor Devices	Tomsk	Russia	111
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5a.16p	COMPOSITIONAL MEDIUM CONSISTED OF ANISOTROPIC FERRITE PARTICLES INSERTED IN NONMAGNETIC MATRIX	Zubkov V. I. Shcheglov V. I.	Institute for Radio-engineering and Electronics RAS	Moscow	Russia	025
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5a.18p	SYNTHESIS AND PHYSICAL PROPERTIES OF SOME COMPOUNDS OF A ¹² B ¹³ C ¹⁴ V ₂ GROUP	Trukhan V. M. Marenkin S. F. Haliakovich T. V.	Scientific-Practical Materials Research Centre NAS of Belarus	Minsk	Belarus	249

5a.19p	THE INFLUENCE OF PRECURSORS GRAIN DIMENSION ON CATION ORDERING IN $\text{Sr}_2\text{FeMoO}_{6-\delta}$	Kalanda N. A. Krupa N. N. Janushkevich K. I. Lobanovskij L. S. Lezhnenko I. V. Pavlenko A. A.	Scientific-Practical Materials Research Centre NAS of Belarus, Institute of Magnetism of NAS and MSS Ukraine	Minsk	Belarus	287
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SESSION 6: VERY HIGH POWER MICROWAVE ELECTRONICS AND EFFECTS

**SevNTU (Studgorodok)
aud. 304 (library)**

TUESDAY, 8.30-10.30

Co-Chairmen:

I. I. MAGDA, Professor

National Scientific Center "KhIPT", Kharkov, Ukraine

V. V. STAROSTENKO, D.Sc.

Tavria National University, Simferopol, Ukraine

6.1	PECULIARITIES OF VIRTUAL CATHODE FORMING IN THE ANULAR ELECTRON BEAM IN THE EXTERNAL MAGNETIC FIELD	Kurkin S. A. Hramov A. E.	Saratov State University, Faculty of Nonlinear Processes	Saratov	Russia	107
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6.4	RELATIVISTIC MAGNETRON OF MILLIMETER WAVEBAND	Magda I. I. Gadetski N. P. Kravtsova E. I. Naumenko V. D. Pushkaryev S. S. Terekhin S. N. Tishchenko A. S.	Institute of Plasma Electronics and New Acceleration Methods of NSC KhIPT NASU, Usikov Institute for Radiophysics and Electronics	Kharkov	Ukraine	364
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6.6	THEORETICAL AND EXPERIMENTAL INVESTIGATION OF NOISE INFLUENCE ON THE KLYSTRON AUTOGENERATOR DYNAMICS	Beloglazkina M. V. Dmitriev B. S. Zharkov Ju. D. Koronovskii A. A. Hramov A. E.	Saratov State University	Saratov	Russia	223

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6.9	INVESTIGATION OF MICRO-WAVE ENERGY PROPAGATION CHARACTER ALONG SINGLE-CONDUCTOR LINE	Yefimov B. P. Khorunzhiy M. O. Kuleshov A. N.	Usikov Institute of Radiophysics and Electronics of NAS of Ukraine	Kharkov	Ukraine	151
6.10	THE CUBIC NONLINEAR THEORY OF PLASMA-BEAM SUPERHETERODYNE FREE ELECTRON LASER OF DOPPLERTRON TYPE	Kulich V. V. Lysenko A. V. Koval V. V.	Sumy State University	Sumy	Ukraine	398

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6.11p	EFFECTS OF TERAHERTZ RADIATION GENERATION BY HOMOGENEOUS LASER-EXCITED SEMICONDUCTORS	Ziaziulia P. A. Malevich V. L. Manak I. S.	Belarussian State University B. I. Stepanov Institute of Physics National Academy of Sciences of Belarus	Minsk	Belarus	311
6.12	SELF-EXCITING SINGLE-CAVITY GYROMULTIPLIER	Bandurkin I. V. Bratman V. L. Volkov A. B. Savilov A. V. Samsonov S. V.	Institute of Applied Physics RAS	Nizhny Novgorod	Russia	406

SESSION 6a: EM AND RADIATION RESISTANCE OF MATERIALS & ELECTRONIC COMPONENT BASE

**SevNTU (Studgorodok)
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TUESDAY, 10.45-12.45

Co-Chairmen:

D. V. GROMOV, D.Sc.

Specialized Electronic Systems Co., Moscow, Russia

I. I. MAGDA, Professor

National Scientific Center "KhIPT", Kharkov, Ukraine

6a.1	RADIATION EFFECTS IN BIPOLAR AND CMOS INTEGRATED MICROCIRCUITS	Korshunov F. P. Bogatyrev Yu. V. Belous A. I. Shwedov S. V. Lastovsky S. B. Kulgachev V. I. Gurinovich V. A.	Scientific-Practical Materials Research Centre NAS of Belarus Scientific-Production Corporation "Integral"	Minsk	Belarus	068
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6a.4	HARDNESS OF MICROWAVE MODULE TO NEUTRON IRRADIATION	Gromov D. V. Polevich S. A. Shifman R. G. Shutov K. K.	Specialized Electronic Systems, Svetlana JSC	Moscow St. Petersburg	Russia	206
6a.5	MICROWAVE BALANCED MIXER UNDER THE INFLUENCE OF POWER ELECTROMAGNETIC INTERFERENCE	Klyuchnik A. V. Solodov A. V. Tyulpakov V. N.	MRTI of RAS	Moscow	Russia	059
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6a.10	MODEL OF THE CRYSTAL OF MICROCIRCUITS FOR RESEARCH OF STRAINED CURRENT AND THERMAL MODES	Gribskiy M. P. Grygoriev Ye. V. Starostenko V. V. Taran Ye. P. Unzhakov D. A.	Taurida national university V. I. Vernadsky	Симферополь	Ukraine	211
6a.11	RADIATION STABILITY OF SOI AND SOS CMOS LSI	Demchenko A. Syakersky V. Shvedov S. Bondarenko V. Dolgyi L.	Integral RPC, Belarusian State University of Informatics and Radioelectronics	Minsk	Belarus	404

SESSION 8/1: OBJECTS AND MEDIA PARAMETERS GAUGES

**SevNTU (Studgorodok)
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TUESDAY, 13.45-15.45

Co-Chairmen:

S. D. VOTOROPIN, C.Sc.

"NIIPP" Public Corporation, Tomsk, Russia

S. V. PLAKSIN, C.Sc.

Institute of Transport Systems and Technology, NASU, Dnepropetrovsk, Ukraine

INV.12	DIFFRACTION MICROWAVE AND MILIMETER-WAVE RADIO DEVICES AND SYSTEMS: PHYSICS OF INTERACTIONS AND OPERATION PRINCIPLES	Vzyatyshhev V. F. Smolskiy S. M. Orekhov Yu. I. Klyachin S. A. Nikolaenko D. V.	MPEI, D&R Institute of Measuring Systems	Moscow Nizhny Novgorod	Russia	386
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8.2	THE MICROWAVE DEVICE FOR DISPLACEMENT PARAMETER AND VIBRATION MEASUREMENTS	Drobakhin O. O. Zabolotny P. I.	Institute of Technical Mechanics of the NAS of Ukraine	Dnepropetrovsk	Ukraine	013
8.3	MICROWAVE PERMITTIVITY MEASUREMENT OF MULTICOMPONENT SOLUTIONS AT TWO FREQUENCIES	Anikina N. S. Gerzhykova V. G. Golubnichaya G. V. Gorobchenko O. A. Zhylyakova T. A. Kirichenko A. Ya. Nikolov O. T.	Usikov Institute of Radiophysics and Electronics NASU National Institute of Vine and Wine "Magarach", UAAS, Kharkov National University	Kharkov Yalta	Ukraine	052
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8.6	SOLID-STATE NON-STATIONARY SPECTROSCOPY OF 1-2.5 THZ FREQUENCY RANGE	Vaks V. L. Illyuk A. V. Panin A. N. Pripolsin S. I. Paveliev D. G. Koshurinov Yu. I.	Institute for Physics of Microstructures RAS, N. I. Lobachevsky Novgorod State University	Nizhny Novgorod	Russia	182
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8.8	MEASUREMENT OF DISPLACEMENT PARAMETERS FOR PLANE ELEMENTS BY THE MICROWAVE METHOD USING NEURAL NETWORK TECHNOLOGIES	Drobakhin O. O. Doronin A. V. Saltykov D. Yu. Grigoriev V. V.	Institute of Technical Mechanics of the NAS of Ukraine	Dnepropetrovsk	Ukraine	327
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8.9p	TECHNOLOGY FOR FORMATION OF PHOTONIC CRYSTALS USING UHF ELASTIC WAVE INTERFERENCE	Krutov V. V. Zasovin E. A. Mikhalevich V. G. Sigov A. S. Shchuka A. A. Kabin D. V.	Moscow State Institute of Radio Engineering, Electronics, and Automation General Physics Institute of RAS	Moscow	Russia	145
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SESSION 8/2: FUNCTIONAL UNITS

**SevNTU (Studgorodok)
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TUESDAY, 16.00-18.00

I. B. SHIROKOV, C.Sc.
Sevastopol National Technical University, Ukraine
S. D. VOTOROPIN, C.Sc.
"NIIPP" Public Corporation, Tomsk, Russia

8.14	Ka-BAND AND VA-BAND SAMPLES DESIGNED IN OS "CONCERN SOZVEZDIE"	Radko N. M. Kozachok N. I. Ibragimov N.G. Irkutsky O. A. Stepanov V. G.	Open Society "Concern Sozvezdie"	-Voronezh	Russia	076
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8.20	THE SYSTEM FOR PEOPLE RESCUE IN THE CASE OF OBSTRUCTION	Shirokov I. B. Durmanov M. A.	Sevastopol National Technical University	stopol	Ukraine	306

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SESSION 3/4: INFORMATION RESOURCES & NETWORKS I

**SevNTU (Studgorodok)
aud. 310 (library)**

TUESDAY, 8.30-10.30

Co-Chairmen:

L. S. GLOBAL, Professor

National Technical University of Ukraine "KPI", Kiev

N. A. ALEKSEYEV, C.Cs.

National Technical University of Ukraine "KPI", Kiev

3.46	THE APPROACHES FOR EXTENDED PERSONAL SERVICES ESTIMATION	Dyadenko A. Gütter D. Globa L.	Dresden University of Technology, NTUU "KPI"	Dresden Kiev	Germany Ukraine	337
3.47	CANDY SITE FINDER, A PLANNING TOOL FOR WIRELESS NETWORKS	Luntovskyy A. Uhlig S. Schill A.	Dresden University of Technology	Dresden	Germany	014
3.48	INTEGRATED DESIGN TOOLS FOR COMBINED LAN	Luntovskyy A. Uhlig S. Gütter D. Schill A.	Dresden University of Technology	Dresden	Germany	027
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3.51	PERVASIVE COMPUTING USAGE FOR REALIZATION CONCEPTION SMART AUDITORY	Andrieshyna U. A. Ternovoy M. Y.	National Technical University of Ukraine	Kiev	Ukraine	330
3.52	INFORMATION PROCESSING APPROACH BASED ON WEB-SERVICES	Rybina K. V. Ternovoy M. Y.	National Technical University of Ukraine Kyiv Polytechnic University	Kiev	Ukraine	338
3.53	MODELLING OF TURBOCODING PARAMETERS FOR SOFTWARE DEFINED RADIO	Tykhonenko I. Ladyk O.	National Technical University of Ukraine "KPI", Institute of Telecommunication Systems	Kiev	Ukraine	325

3.54	SOFTWARE UPDATING OF THE MOBILE SDR-SYSTEMS	Globa L. S. Kurdecha V. V.	Institute of Telecommunication systems NTUU "KPI"	Kiev	Ukraine	335
3.55	THE MODEL OF MULTI-THREAD ROUTING FOR BROADBAND DIGITAL NETWORKS WITH INTEGRAL SERVICE	Globa L. S. Skulish M. A.	The Institute of Telecommunication systems, NTUU "KPI"	Kiev	Ukraine	336

SESSION 3/5: INFORMATION RESOURCES & NETWORKS II

**SevNTU (Studgorodok)
aud. 310 (library)**

TUESDAY, 10.45-12.45

Co-Chairmen:

L. S. GLOBA, Professor

National Technical University of Ukraine "KPI", Kiev

N. A. ALEKSEYEV, C.Cs.

National Technical University of Ukraine "KPI", Kiev

3.56	TOOL OF SYSTEM PROTOTYPE VISUALIZATION	Globa L. S. Yermolchev F. V. Kot T. N.	National Technical University of Ukraine "Kiev Polytechnic Institute"	Kiev	Ukraine	329
3.57	DISTRIBUTED SOFTWARE TOOLKIT FOR APPLICATION PROTOTYPING SUPPORT	Globa L. S. Kot T. N. Oleniuk V. N.	National Technical University of Ukraine "Kiev Polytechnic Institute"	Kiev	Ukraine	334
3.58	ENVIRONMENT FOR SYSTEM PROTOTYPE ANALYSIS AND TESTING	Globa L. S. Kot T. N. Oleniuk V. N.	National Technical University of Ukraine "Kiev Polytechnic Institute"	Kiev	Ukraine	333
3.59	INTEGRATED SOFTWARE ENVIRONMENT DEVELOPMENT	Globa L. S. Kot T. N.	Institute of telecommunication systems at the NTUU "KPI"	Kiev	Ukraine	332
3.60	PARALLEL ALGORITHMS PERFORMANCE TOOLS IN NETWORK ENVIRONMENT	Globa L. S. Iermakova E. A.	Institute of Telecommunication Systems NTUU "KPI"	Kiev	Ukraine	331
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SESSION 5/1: FILTERS & RESONATORS

**SevNTU (Studgorodok)
aud. 310 (library)**

TUESDAY, 13.45-15.45

Co-Chairmen:
Yu. M. POPLAVKO, Professor
National Technical University of Ukraine "KPI", Kiev
V. F. VZYATYSHEV, Professor
Moscow Power Engineering Institute, Russia

5.1	DESIGNING OF RAPID-TUNABLE ASS-BAND (PBF) AND AND-ELIMINATION (BEF) FILTERS ON MAGNETOSTATIC WAVES (MSW) OPERATED BY PERSONAL COMPUTER (PC)	Buvin G. M. Popina S. M., Simanchuk B. P. Chechetin A. V.	NP OAO "Faza"	Rostov-on-Don	Russia	109
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5.3	KU-BAND DIELECTRIC RESONATOR FILTERS	Bunin A. V. Vishnyakov S. V. Gevorkyan V. M. Kazantsev J. A. Mikhalin S. N. Polukarov V. I.	Moscow Power Engineering Institute	Moscow	Russia	160
5.4	ACTIVE MICROSTRIP DIRECTIONAL FILTER OF TRAVELING-WAVE	Glushechenko E.N.	Open JSC «SATURN»	Kiev	Ukraine	176
5.5	KU-BAND DIELECTRIC RESONATOR DIPLEXER	Bunin A. V. Vishnyakov S. V. Gevorkyan V. M. Kazantsev J. A. Mikhalin S. N. Polukarov V. I.	Moscow Power Engineering Institute	Moscow	Russia	161
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5.7	THE COUPLED RESONANCES OF MULTIPLE DIELECTRIC RESONATOR STRUCTURES IN METAL WAVEGUIDES	Trubin A. A.	Telecommunication System Institute of National Technical University of Ukraine (KPI)	Kiev	Ukraine	001
5.8	AN OPEN RESONATOR FOR MEASUREMENTS OF THE STRONGLY ABSORBING SUBSTANCES	Kuzmichev I. K. Poyedinchuk A. Ye. Popkov A. Yu.	The A. Ya. Usikov's Institute for Radio Physics and Electronics of the NASU	Kharkov	Ukraine	116

5.9	WAVEGUIDE-FERRIT RESONATOR WITH LATERAL METALLIC FILMS	Mizernik V. N. Shmat'ko A. A.	Scientific Physical-Technologic Center, KhNU	Kharkov	Ukraine	255
5.10	CIRCUITS OF COMBINED ABSORPTIVE FILTERS	Maljutin N. D. Loschilov A. G. Ladur A. A.	TUSUR	Tomsk	Russia	201
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5.11p	RADIOPULSE PROTECTION DEVICE BASEDON THE HTS FILM	Belyaev B. A. Leksikov A. A. Serzhantov A. M. Drokin N. A.	Institute of Physics	Krasnoyarsk	Russia	309
5.12p	MICROSTRIP MODELS OF BANDPASS FILTERS BASED ON 2D-PHOTONIC CRYSTALS	Voloshin A. S. Zanco A. I.	Institute of Physics	Krasnoyarsk	Russia	274
5.13p	STRIPLINE HALF-WAVE RESONATOR ON SUSPENDED SUBSTRATE	Belyaev B. A. Leksikov A. A. Serzhantov A. M. Sukhin F. G.	Institute of Physics	Krasnoyarsk	Russia	272
5.14p	EXCITATION AND PROPAGATION OF SPIN WAVES IN FERROMAGNETIC FILMS AT THE FIRST ORDER PARAMETRIC RESONANCE	Grishin S. V. Davoyan A. R. Sharaevsky Yu. P.	Saratov State University	Saratov	Russia	190
5.15p	CAPABILITIES OF DETERMINATION OF REAL-TIME MATERIAL PARAMETERS FOR WDR	Bilous I. O. Bilous R. I. Motornenko A. P.	Usikov Institute for Radiophysics and Electronics NASU	Kharkov	Ukraine	102
5.16p	USING CORRELATION SIGNAL PROCESSING FOR THE EXTRACTION OF THE SIGNALS FROM A NOISE LEVEL IN FERROMAGNETIC FILMS	Melkov G. A. Moiseienko V. A. Prokopenko O. V. Slobodianiuk D. V.	National Taras Shevchenko University of Kiev	Kiev	Ukraine	023
5.17p	CHAOTIC MW SIGNAL RESPONES IN A SELF-OSCILLATORY SYSTEM WITH THE NONLINEAR MAGNETOSTATIC WAVE TRANSMISSION LINE	Beginin E. N. Grishin S. V. Zar'kova E. V. Sharaevsky Yu. P.	Saratov State University	Saratov	Russia	189

SESSION 5/2: MULTIPORT, CONTROLLED & NONMUTUAL DEVICES

**SevNTU (Studgorodok)
aud. 310 (library)**

TUESDAY, 16.00-18.00

Co-Chairmen:

Yu. M. POPLAVKO, Professor

National Technical University of Ukraine "KPI", Kiev

A. V. CHECHETIN

Scientific Research Company "Faza", Rostov-on-Don, Russia

5.18	ELECTRICALLY-TUNABLE MICROWAVE PHASE SHIFTER BASED ON FERRITE-PIEZOELECTRIC LAYERED STRUCTURE	Tatarenko A. S. Srinivasan G. Bichurin M. I.	Oakland University, Institute of Electronic and Information System NSU	Rochester	USA	029
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5.19	BUTLER MATRICES FOR 4-8 GHz BAND	Sledkov V. A. Obrezanova L. V. Manuilov M. B.	FGNU NII "Spets-vuzavtomatika", NP OAO "Faza" South Federal University	Rostov-on-Don	Russia	137
5.20	24-CHANNEL FREQUENCY DIVIDING UNIT OF S-BAND	Kondratenko A. V. Miller A. I. Shevliakov M. L.	MICRAN Co.	Tomsk	Russia	294
5.21	BAND-PASS TUNABLE FILTER BASED ON PLANAR DIELECTRIC RESONATORS	Buslov O. Yu. Keys V. N. Kozyrev A. B. Shimko A. Yu. Alford N. McN. Petrov P. K.	St. Petersburg National Electrotechnical University Department of Materials, Imperial College	St.-Petersburg London	Russia UK	304
5.22	OPTIMISATION OF NONUNIFORM FIELD BIASED MAGNETOSTATIC SURFACE WAVES TRANSMISSION LINE PARAMETERS	Zubkov V. I. Shcheglov V. I.	RAS Institute for Radioengineering and Electronics	Moscow	Russia	024
5.23	CALCULATION METHOD FOR LOOP-TYPE PHASE SHIFTERS AT COUPLED TRANSMISSION LINES	Oborzhytskyy V. I. Samsonyuk O. V.	Lviv Polytechnic National University	Lvov	Ukraine	101
5.24	TUNING OF ELECTRIC PARAMETERS OF WAVEGUIDE COAXIAL RESONATOR	Motornenko A. P. Skuratovskiy I. G. Martynyuk S. P.	Usikov Institute for Radiophysics and Electronics of NASU	Kharkov	Ukraine	049
5.25	THE DESIGN FEATURES OF MIDDLE-POWER, LOW-LOSS, L-BAND CIRCULATORS	Zakharov I. V. Simanchuk B. P. Chechetin A. V.	Scientific Research Company "Faza" Ltd.	Rostov-on-Don	Russia	169
poster papers						
5.26p	BROADBAND POWER SPLITTER-COMBINER APPLICATION IN PHASED-ARRAY ANTENNAS	Vountesmyer V. S. Krasilitch G. P.	National Technical University of Ukraine "Kiev Polytechnic Institute"	Kiev	Ukraine	303
5.27p	FORMATION OF TWO-DIMENSIONAL CHANNELS OF MAGNETOSTATIC WAVES IN COUPLED STRUCTURES ON FERROMAGNETIC FILMS	Beginin E. N. Malugina M. A. Sharaevskii Yu. P.	Saratov State University	Saratov	Russia	259
5.28p	BROADBAND POWER DIVIDERS FOR 0.5-18 GHz FREQUENCY BAND	Aphanasiev P. O. Sledkov V. A. Obrezanova L. A.	FGNU NII "Spets-vuzavtomatika", NP OAO "Faza"	Rostov-on-Don	Russia	139
5.29p	IMAGINARY AND REAL WAVE BEAMS IN ANGLE REFLECTORS DIFFRACTION FIELD	Rudnitsky A. S.	Belarusian State University	Minsk	Belarus	113
5.30p	COUPLING COEFFICIENTS OF STRIPLINE RESONATORS IN THE FILTERS BASED ON SUSPENDED SUBSTRATE	Bal'va Y. F. Serzhantov A. M.	Institute of Physics	Krasnoyarsk	Russia	106

SESSION 5b/1: NANOELECTRONICS & NANOTECHNOLOGY I

**SevNTU (Studgorodok)
aud. 206 (library)**

TUESDAY, 8.30-10.30

Co-Chairmen:

I. A. OBUKHOV, C.Sc.

Interface-MFG Co., Moscow, Russia

I. I. ABRAMOV, Professor

Belarus State University of Informatics and Radioelectronics, Minsk

INV.10	NANOSTRUCTURES OF SI/SIO ₂ /METAL SYSTEMS WITH SWIFT HEAVY ION TRACKS	Kaniukov E. Yu. Demyanov S. E. Petrov A. V.	Scientific-Practical Materials Research Centre NAS of Belarus	Minsk	Belarus	231
5b.1	HIGHLY DOPED NANOSTRUC- TURIZED TEMPLATE OF AN- ODIC ALUMINA	Golovataya S. V. Zubarevich O. I. Knörnschild G. Muravitskaya E. V. Poznyak A. A.	BSUIR, Universidade Fed- eral do Rio Grande do Sul, Brasil, Institute of Physics NAS of Belarus	Minsk	Belarus Brasil	348
5b.2	AlInGaN/GaN HET- EROSTRUCTURES WITH 2D ELECTRON GAS AND QUANTUM WELLS FOR TRANSISTORS AND LIGHT EMITTING DIODES	Yablonskii G. P. Lutsenko E. V. Kalish H. Heuken M.	Institute of Physics of NAS of Belarus Institut für Theoretische Elektrotechnik, RWTH, AIXTRON Aachen, Germany	Minsk Aachen	Belarus Germany	299
5b.3	CALCULATION OF MAGNE- TORESISTANCE OF THIN GaAs QUANTUM WIRES	Pozdnyakov D. V.	Belarus State University	Minsk	Belarus	015
5b.4	ELECTRON DRIFT VELOCITY CONTROL IN TRANSISTOR STRUCTURE BASED ON GaAs QUANTUM WIRE	Borzdov A. V. Pozdnyakov D. V. Borzdov V. M.	Belarus State University	Minsk	Belarus	016
5b.5	CALCULATION OF ELEC- TROPHYSICAL PARAME- TERS OF ARMCHAIR SINGLE-WALL CARBON NANOTUBES	Pozdnyakov D. V.	Belarus State University	Minsk	Belarus	021
5b.6	SYNTHESIS OF BARIUM- STRONTIUM TITANATE FILMS BY SOL-GEL METHOD	Kim Taek Won Gaponenko N. V.	Belarusian State University of Infor- matics and Radio- electronics (BSUIR)	Minsk	Belarus	022
5b.7	LUMINESCENT STRUC- TURES BASED ON POROUS ANODIC ALUMINA	Hluzd Y. V. Orehovskaya T. I. Gaponenko N. V. Molchan I. S. Thompson G. E.	Belarusian State University of Infor- matics and Radio- electronic, Corrosion and Protection Cen- tre, University of Manchester	Minsk	Belarus UK	033

5b.8	SPACE CHARGE EFFECT ON INTERSUBBAND TRANSITION BETWEEN SPLIT LEVELS IN SYMMETRICAL TRIPLE-BARRIER STRUCTURES	Pashkovskiy A. B.	Federal State Unitary Corporation R&PC «Istok»	Fryazino	Russia	362
5b.9	PECULIARITIES OF DOUBLE PHOTON INTERSUBBAND TRANSITION IN COHERENT TRANSPORT TRIPLE-BARRIER STRUCTURES	Pashkovskii A. B.	Federal State Unitary Corporation R&PC «Istok»	Fryazino	Russia	363
poster papers						
5b.10p	SOME APPROACHES TO CREATION OF THE METHOD OF FORMATION OF NANOELECTRONIC STRUCTURES WITH HIGH REPRODUCIBILITY	Zolot A. I. Hodakovskij N. I.	The V. Glushkov Institute of Cybernetics NAS of Ukraine	Kiev	Ukraine	063
5b.11p	RELAXATION PROCESSES IN SUBMICRON STRUCTURES WITH QUANTUM DOTS	Timofeyev V. I. Faleyeva E. M.	National Technical University of Ukraine "KPI"	Kiev	Ukraine	208

SESSION 5b/2: NANO ELECTRONICS & NANOTECHNOLOGY II

**SevNTU (Studgorodok)
aud. 206 (library)**

TUESDAY, 10.45-12.45

Co-Chairmen:

I. A. OBUKHOV, C.Sc.

Interface-MFG Co., Moscow, Russia

I. I. ABRAMOV, Professor

Belarus State University of Informatics and Radioelectronics, Minsk

INV.11	BROAD-BAND MICROWAVE ABSORBING COVERS ON THE BASE OF MULTILAYERED STRUCTURES OF SPUTTERED HYDROGENATED CARBON WITH MAGNETIC 3d-METAL NANOPARTICLES	Nikolaychuk G. A. Yakovlev S. V. Lutsev L. V. Petrov V. V. Tsvetkova E. A. Moroz O. Yu. Nakvasina E. Yu. Trifonov S. A.	Research Institute "Ferrite-Domen"	St.-Petersburg	Russia	180
5b.12	ELECTRODYNAMIC MATERIALS ON THE BASIS OF THE NANOSTRUCTURED COMPOSITES	Kolesov V. V. Fionov A. S. Popkov O. V. Taratanov N. A. Yurkov G. Yu.	Institute of Radio Engineering and Electronics RAS, Institute of General and Inorganic Chemistry RAS	Moscow	Russia	254
5b.13	COLLECTION AND STORAGE OF HYDROGEN MICRO- AND NANOPOWDERS OF SILICON	Kovalevsky A. A. Strogova A. S.	Belarussian State University of Informatics and Radioelectronics	Minsk	Belarus	146
5b.14	NANOTECHNOLOGY OF CoSi ₂ EPITAXIAL FILM FORMATION ON MONOCRYSTALLINE SILICON	Makogon Yu. N. Pavlova E. P. Sidorenko S. I. Beddies G.	NTUU "KPI" Institute of Physics, Chemnitz University of Technology	Kiev Chemnitz	Ukraine Germany	017

5b.15	WIDEBAND MATCHED LOADS BASED ON WAVEGUIDE PHOTONIC STRUCTURES WITH NANOMETER METAL LAYERS	Usanov D. A. Skrupal A. V. Abramov A. V. Bogolubov A. S. Skvortsov V. S. Merdanov M. K.	Saratov State University by N. G. Chernyshevsky JSC «RPC «Tristan»	Saratov Moscow	Russia	094
5b.16	TERBIUM PHOTOLUMINESCENCE IN SOL-GEL DERIVED ITTRITIUM-ALUMINA GARNETS	Maliarevich G. K. Gaponenko N. V.	BSUIR	Minsk	Belarus	156
5b.17	FIELD EMISSION BEHAVIOUR OF CARBON NANOTUBES EMBEDDED INTO ANODIC ALUMINA PORES ON METAL OXIDE CATALISTS	Gorokh G. G. Solovei D. V. Sakharuk V. N.	Belarusian State University of Informatics and Radioelectronic BSUIR	Minsk	Belarus	158
5b.18	NON-SINGLE SOLUTIONS OF CHARGE TRANSPORT EQUATION IN SUBSTRATE OF RESONANT-TUNNELING DIODE	Obukhov I. A. Kvjatkevich I. I.	Interface-MFG	Moscow	Russia	178
5b.19	RESONANT TUNNELING DIODE BASED ON NITRIDE GALLIUM NANOSTRUCTURAL CATHODE	Goncharuk N. M. Karushkin N. F.	SRI «Orion»	Kiev	Ukraine	221
5b.20	THE INFLUENCE OF TRANSVERSE MOMENTUM ON IV-CHARACTERISTICS OF RTD	Abramov I. I. Goncharenko I. A. Kolomejtseva N. V.	BSUIR	Minsk	Belarus	354
5b.21	SIMULATION OF SINGLE-ELECTRON 1D AND 2D ARRAYS WITH USE OF PHYSICAL MODELS	Abramov I. I. Baranoff A. L. Lavrinovich A. M. Pizhyk N. V.	Belarusian State University of Informatics and Radioelectronics	Minsk	Belarus	355

SESSION 9/1: RADIOASTRONOMY & ATMOSPHERE RESEARCH

**SevNTU (Studgorodok)
aud. 206 (library)**

TUESDAY, 13.45-15.45

Co-Chairmen:

V. M. SHULGA, Member of NASU, Professor
Institute of Radioastronomy of NASU, Kharkov, Ukraine

L. I. TSVETKOV, D.Sc.

Crimean Astrophysical Observatory, Katsiveli, Ukraine

9.1	RESULTS OF INVESTIGATION OF MASER RADIATION SOURCES IN H ₂ O LINE (1,35 CM) USING RT-22 KrAO IN 2007	Volvach L. N. Shulga V. M. Volvach A. E.	SRI Crimean Astrophysical Observatory, Institute of Radioastronomy	Nauchny Kharkov	Ukraine	380
9.2	BLAZAR 3C 454.3 - THE 2004-2007 OUTBURST IN THE OPTICAL AND RADIO RANGES	Volvach A. E. Volvach L. N. Larionov M. G. Aller M. F. Aller H. D. Villata M. Raiteri C. M.	Crimean Astrophysical Observatory village	Nauchny	Ukraine	381

9.3	SYNCHRONOUS OBSERVATIONS OF THE INTRADAY VARIABILITY OF ACTIVE GALACTIC NUCLEUSES IN OPTICAL AND RADIO RANGES	Volvach O. E. Volvach L. N. Bichkova V. S. Kardashev M. S. Larionov M. G. Vlasyuk V. V. Spiridonova O. I.	Crimean Astrophysical Observatory village	Ukraine	382
9.4	SPECTRUM AND DURATION OF BURSTS OF SOLAR NOISE STORMS	Yurovsky Y. F. Yurovsky Y. Y.	Crimean Astrophysical Observatory	Ukraine	035
9.5	ZEBRA-STRUCTURE of SOLAR MICROWAVE BURSTS	Yurovsky Y. F.	Crimean Astrophysical Observatory	Ukraine	036
9.6	ON THE PROBLEM OF MICROWAVE ANTENNA POINTING FOR SPACE SOLAR POWER STATION	Khoroshilov S. V.	Institute of Technical Mechanics NASU & NSAU	Ukraine	087
9.7	MILLIMETER WAVELENGTH RANGE RADIOMETERS WITH A SOLID-STATE MODULATOR-CALBRATOR	Fedoseev L. I. Shvetsov A. A. Shkaev A. P. Demkin V. M. Karashtin D. A. Kukin L. M. Bozhkov V. G. Genneberg V. A. Petrov I. V. Schitov A. M.	Institute of Applied Physics of Russian Academy of Sciences Research Institute of Semiconductor Devices Institute of Electronic Measurements "Kvarz"	Nizhny Novgorod	Russia 262
9.8	IMPACT OF THE IONOSPHERIC AND ATMOSPHERIC IRREGULARITIES ON THE NAVIGATIONAL SATELLITES SIGNALS PROPAGATION	Ilyushin Ya. A.	Moscow State University	Moscow	Russia 089
9.9	THE FEATURES OF THE PARTIAL REFLECTION SIGNALS, RADIONOISES AND ELECTRON DENSITY VARIATIONS IN THE MIDDLE LATITUDE D-REGION OF THE IONOSPHERE DURING THE MAGNETIC STORMS IN 2004–2006	Gokov A. M. Tyrnov O. F.	V. Karazin National University	Kharkov	Ukraine 040
9.10	STUDYING OF POSSIBILITY OF DETERMINATION OF PARAMETERS OF HYDROMETEORS USING RADIOSIGNALS OF GEOSTATIONARY SATELLITES	Mytsenko I. M. Khalameyda D. D. Khomeenko S. I.	Institute of Radiophysics and Electronics of National Academy of Science of Ukraine	Kharkov	Ukraine 120
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9.11p	DIAGNOSTICS OF A PROPAGATION MEDIUM OF GPS SIGNALS BY SINGLE-FREQUENCY RECEIVERS	Gorbachev O. A. Nechaev E. E.	Moscow State Technical University of Civil Aviation	Moscow	Russia 005
9.12p	SOME FEATURES OF GLOBAL SEISMICITY IN PERIODS AFTER THE STRONGEST SOLAR FLARES	Gokov A. M.	V. Karazin National University	Kharkov	Ukraine 039

9.13p	RESULTS OF COMPARING BETWEEN EXPERIMENTAL OBSERVATIONS OF SCHUMANN RESONANCE AND THE OTD-MODEL OF WORLD THUNDERSTORMS	Yatsevich E. I. Pechony O. B.	Institute for Radiophysics and Electronics, NASU Department of Geophysics and Planetary Sciences, Tel Aviv University	Kharkov Tel Aviv	Ukraine Israel	131
9.14p	TROPOSPHERE DIAGNOSTICS ON SATELLITE RADIOSETTING	Alexeyev G. A. Belobrova M. V.	Usikov Institute for Radiophysics and Electronics of NASU	Kharkov	Ukraine	170
9.15p	RECONSTRUCTION OF SPATIAL SPECTRUM OF TROPOSPHERE NON-UNIFORMITIES ON AMPLITUDE FLUCTUATIONS TRANSVERSAL CORRELATION FUNCTIONS	Alexeyev G. A. Belobrova M. V.	Usikov Institute for Radiophysics and Electronics of National Academy of Sciences of Ukraine	Kharkov	Ukraine	171

SESSION 9/2: RADARS AND REMOTE SENSING

**SevNTU (Studgorodok)
aud. 206 (library)**

TUESDAY, 16.00-18.00

Co-Chairmen:

V. V. PUSTOVOYTENKO, C.Sc.

Marine Hydrophysical Institute, NASU, Sevastopol, Ukraine

S. I. KHOMENKO, C.Sc.

Institute of Radiophysics and Electronics, NASU, Kharkov, Ukraine

9.16	RESULTS OF REMOTE SENSING IN MM-RANGE OF RADIO WAVES	Khrustalev A. A. Egorov S. N.	Federal Scientific and Production Center Measuring System Research Institute named after Yu. Ye. Sedakov	Nizhny	Russia	010
9.17	THE FRACTAL ANALYSIS OF RADAR IMAGES OF TROPICAL CYCLONES	Yatsevich S. Ye. Yefimov V. B. Ivanov V. K. Pashchenko R. E. Tsybmal V. N.	Institute for Radiophysics and Electronics, NASU Center for Radiophysical Sensing of the Earth, NASU NSA	Kharkov	Ukraine	011
9.18	OBJECTS DETECTION AT FEATURE LEVEL USING FORM COEFFICIENT	Prudyus I. N. Laz'ko L. V. Semenov S. O.	National University "L'vivs'ka politehnika" Institute of Telecommunications, Radio Electronics and Electrical Engineering	L'viv	Ukraine	397

9.19	PROCEDURE OF CHOICE OF AN EXTRANEOUS SOURCE OF RADIO EMISSION, FOR THE DIVERSED RADAR SYSTEM OF METEORIC TRAILS	Lykov Y. V. Oleynikov A. N.	Kharkiv National University of Radioelectronics (KNURE)	Kharkov	Ukraine	126
9.20	PROVIDING BASIC DATA FOR THE WOOD SEGMENT OF GEOUA - INFORMATION SERVICE SYSTEM "LESKOSMOS" (FOREST-UA)	Atroshenko L. M. Gorobets N. N. Kostjashkin S. I. Kostjashkina T. D. Safronova L. P.	Kharkov National University, Kharkov State Expedition for Wood Management	Kharkov	Ukraine	197
9.21	SYSTEM OF INFORMATION SERVICE "LESKOSMOS" (FOREST - UA) AS A SEGMENT OF NATIONAL PROGRAM GEOUA	Atroshenko L. M. Bogomolov V. V. Bushuev E. I., Voloshin V. I. Gorobets N. N. Kostjashkin S. I.	Kharkov National University, State Enterprise "Dniproskosmos", Kharkov State Expedition for Wood Management	Kharkov	Ukraine	198
9.22	ANALYSIS OF RELATIVE PERMITS DEPENDING ON SIGNAL-NOISE RATIO AT THE USE OF OPTIMAL ON MINIMUM ERROR AVERAGE SQUARE IN SIGNAL PROCESSING ALGORITHMS	Korolyov S. V.	ELSOV Research & production center	Moscow Zelenograd	Russia	235
9.23	USE DOPPLER RADARS FOR STUDYING TURBULENCE OF AIR WEIGHTS IN STORM CLOUDS	Lutsenko V. I. Lutsenko I. V.	Usikov Institute of Radiophysics and Electronics NASU	Kharkov	Ukraine	270
9.24	DIAGNOSTICS OF THE TROPOSPHERE REFRACTION BY THE SIGNALS OF TV CENTERS AND SATELLITE RADIATION	Lutsenko V. I. Lutsenko V. I. Sinitsky V. B.	Usikov Institute of Radiophysics and Electronics NASU	Kharkov	Ukraine	276
9.25	DIAGNOSTICS OF THE TROPOSPHERE REFRACTION BY MEANS OF THE RADIO SETTINGS OF THE SATELLITES	Lutsenko V. I. Lutsenko I. V. Sinitsky V. B.	Usikov Institute of Radiophysics and Electronics NASU	Kharkov	Ukraine	233
poster papers						
9.26p	COMPARATIVE ANALYSIS OF SCATTERING DIAGRAM CALCULATION FOR MONOCHROMATIC AND PULSED INPUT SIGNALS	Soldatenkov V. P. Yurtsev O. A.	Byelorussian State University of Informatics and Radioelectronics	Minsk	Belarus	054
9.27p	FORECASTING OF ATMOSPHERE CHARACTERISTICS DETERMINING RADAR OBSERVABILITY	Batueva E. V.	Department of Physical problems of BSC SD RAS	Ulan-Ude	Russia	112
9.28p	ALGORITHMS OF SIGNALS PROCESSING IN RADIO ACOUSTIC SYSTEMS	Kartashov V. M. Pashchenko S. V. Yatsenko P. A.	Kharkov National University of Radio Electronics	Kharkov	Ukraine	228
9.29p	LATERAL SPECTRA OF GREEN FUNCTIONS OF LAYERED MEDIUM IN PROBLEMS OF SCANNING TOMOGRAPHY	Gaikovich P. K. Gaikovich K. P.	Nizhniy Novgorod State University Institute for Physics of Microstructures RAS	Nizhniy Novgorod	Russia	352

9.30p	INVERSE PROBLEM OF SCATTERING IN MULTILAYERED MEDIUM BEYOND BORN APPROXIMATION	Gaikovich K. P.	Institute for Physics of Microstructures RAS	Nizhniy Novgorod	Russia	353
9.31p	DRIVE RELIABILITY EVALUATION ACCURACY INCREASING FOR REMOTE SENSING SPACECRAFT ELEMENTS	Shatikhin V. E. Bushans'ka V. V. Popel' V. M. Khoroshilov V. S.	National Space Agency of Ukraine, Yuzhnoe State Design Office named after M. K. Yangel	Kiev Dnepropetrovsk	Ukraine	012

THURSDAY, 11 SEPTEMBER

2nd PLENARY SESSION
SevNTU, aud. 418

THURSDAY, 8.30-10.30

Co-Chairmen:

A. N. BRATCHIKOV, Professor

Moscow Aviation Institute (Technical University), Russia

M. P. BATURA, Professor

Belarus State University of Informatics and Radioelectronics, Minsk

M. Ye. ILCHENKO, Corresponding Member of NASU, Professor

National Technical University of Ukraine "KPI", Kiev

INV.2	"PROGRAMMABLE RADIO" PLATFORM ON THE BASIS OF NATIONAL INSTRUMENTS PXI-SYSTEM	Gladkov M. N. Rudanov G. S.	National Instruments	Moscow	Russia	395
INV.3	ANTENNA MEASUREMENTS IN UKRAINE	Markov V. I. Usin V. A.	The Research and Development Centre of Radio Engineering and Optic-Electronic Systems "Obriy", Kharkov	Snovjanka	Ukraine	192
INV.4	THE FULL-WAVE ANALYSIS OF MICROSTRIP PHASED ARRAY OF COMBINED PRINTED RADIATORS WITH ADEQUATE SIMULATION OF FEEDS	Kasyanov A. O. Obukhovets V. A.	Taganrog Institute of Technology	Taganrog	Russia	258
INV.5	THE ROLE OF MODULATION IN BIOLOGICAL EFFECTS OF LOW-INTENSITY EXTREMELY HIGH-FREQUENCY ELECTROMAGNETIC RADIATION	Gapeyev A. B. Chemeris N. K.	Institute of Cell Biophysics of Russian Academy of Sciences	Pushchino, Moscow region	Russia	218

SESSION 8a: MEDICAL & ECOLOGICAL APPLICATIONS

SevNTU (Studgorodok)
aud. 418

THURSDAY, 11.00-13.00

Co-Chairmen:

N. K. CHEMERIS, Professor

Institute of Cell Biophysics of RAS, Pushchino, Moscow reg., Russia

A. F. YANENKO, Professor

National Technical University of Ukraine "KPI", Kiev

8a.1	THE DESCRIPTION OF INFLUENCE OF MICROWAVE RADIATION LOW-INTENSITY ON ACTIVE TRANSPORTATION OF SUBSTANCES THROUGH THE CAGE MEMBRANE	Shein A. G. Gretsova N. V. Kovalev I. A.	Volgograd State Technical University	Volgograd Russia	339
8a.2	THE INFLUENCE OF CIRCULARLY POLARIZED MICROWAVE IRRADIATION ON PROPERTIES OF PLASMA MEMBRANE OF HUMAN CELLS	Shckorbatov Y. G. Pasiuga V. N. Grabina V. A. Bykov V. N. Ivanchenko D. D.	Kharkov National University	Kharkov Ukraine	296
8a.3	HYDROLYTIC ENZYME PREPARATIONS AS THE OBJECTS OF EHF RADIATION INFLUENCE	Krynskaya A. Y. Gamayurova V. S. Sukhanov P. P.	Kazan State Tech- nological University	Kazan Russia	282
8a.4	SYSTEM FOR RADIOWAVE DIAGNOSTICS OF ONCOLOGICAL SKIN DISEASES	Tamelo A. A. Naumovitch N. M. Vladimirov D. B.	Belarussian State University of Infor- mation Science and Radio Engineering	Minsk Belarus	243
8a.5	STUDY OF THE INFLUENCE OF LOW-INTENSITY EXTREMELY HIGH-FREQUENCY ELECTROMAGNETIC RADIATION ON GROWTH RATE OF SOLID EHRLICH CARCINOMA	Gapeyev A. B. Shved D. M. Mikhailik E. N. Chemeris N. K.	Institute of Cell Bio- physics of Russian Academy of Sci- ences	Push- chino, Moscow region	Russia 219
8a.6	INVESTIGATION OF ELECTROMAGNETIC PROPERTIES OF WATER AT WEAK LEVEL OF MM RANGE SIGNALS	Pochekailova L. P. Peregudov S. N. Yanenko O. P.	G.E. "UkrNDNC", NTUU "KPI"	Kiev Ukraine	134
8a.7	APPLICATION OF NEAR-FIELD MICROWAVE PROBING TO BREAST TUMOR DETECTION	Galin M. A. Reznik A. N.	Institute for Physics of Microstructures RAS	Nizhny Novgorod Russia	119
8a.8	RESEARCH OF NON-THERMAL MACROWAVE ENERGY INFLUENCE UPON YEAST CULTURES	Zavyalov M. A. Lomachinski V. A. Nikonov A. O. Prokopenko A. V. Filippovich V. P.	All-Russian Re- search Institute of Canning and Vegetable- drying Industry	Vidnoe city, Mos- cow Re- gion Russia	062

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**SevNTU (Studgorodok)
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THURSDAY, 14.00-16.00

Co-Chairmen:

P. P. YERMOLOV, C.Sc.

Popov Crimean Scientific and Technology Center, Sevastopol, Ukraine

Ye. A. FEDOTOV

Military & Scientific Society of Black Sea Fleet of Russia, Sevastopol

INV.6	DISCOVERY OF THE COSMIC MICROWAVE BACKGROUND ANISOTROPY. 25 YEARS OF THE "RELICT" SPACE EXPERIMENT	Skulachev D. P.	Space Research Institute of RAS (IKI)	Moscow	Russia	234
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FRIDAY, 12 SEPTEMBER

**3-e CLOSING SESSION
PLENARY SESSION
aud. 420**

FRIDAY, 14.30-16.00

Co-Chairmen:

M. P. BATURA, Professor

Belarus State University of Informatics and Radioelectronics, Minsk

P. P. YERMOLOV, C.Sc.

Kharkov National University of Radioelectronics, Ukraine

Change of views, Conference decree.

Presentation of Organizing Committee Prizes

NOTES