

C O N T E N T S

SUBJECT AREA 3.

NONLINEAR PHENOMENA AND SELF-ORGANIZATION PROCESSES

	Pages
N. E. Kosmatov, V. E. Zakharov, V. F. Shvets COMPUTER SIMULATION OF WAVE COLLAPSES IN NONLINEAR SCHROEDINGER EQUATION	2
A. I. Dyachenko, V. E. Zakharov, A. M. Rubenchik, V. F. Shvets STEP-BY-STEP SIMULATION OF TWO DIMENSIONAL LANGMUIR COLLAPSE	4
V. E. Zakharov, A. N. Pushkarev, A. M. Rubenchik, V. F. Shvets PARTICLE SIMULATION OF THREE-DIMENSIONAL LANGMUIR COLLAPSE	6
V. N. Tsytovich and S. V. Vladimirov SUPERSONIC LANGMUIR SOLITONS	8
Lj. Hadžievski, A. M. Rubenchik, E. G. Shapiro, M. M. Škorić, S. K. Turitsin THE INFLUENCE OF A MAGNETIC FIELD ON A SOLITON STABILITY	10
V. M. Malkin BI-SELF-SIMILAR WAVE COLLAPSE	12
E. M. Gromov, V. I. Talanov DYNAMIC SOLITONS OF A HIGH FREQUENCY FIELD IN MEDIA WITH A PARABOLIC DENSITY BARRIER	14
A. V. Kochetov RADIATION OF ELECTROMAGNETIC WAVES BY TE-SOLITONS	16
Y. Nishida, K. Yoshida and T. Nagasawa REFRACTION OF ION ACOUSTIC SOLITON THROUGH THE SPACE CHARGE SHEATHS	18
T. Yamazumi and S. Ikezawa CONTROL OF THE PARAMETERS OF THE TWO ELECTRON TEMPERATURE PLASMA AND PROPAGATION OF THE COMPRESSIVE SOLITON	20
N. S. Buchelnikova, E. P. Matochkin LARGE AMPLITUDE LANGMUIR WAVES. WAVE BREAKING AND ELECTRON HEATING	22

A. T. Altyntsev, V. I. Krasov, N. V. Lebedev, V. L. Paperny and N. A. Strokin	24
MAGNETIC ENERGY DISSIPATION DUE TO CURRENT FILAMENT COALESCENCE	
D. Jovanović, H. L. Pecseli, J. Juul Rasmussen	26
KINETIC THEORY OF PLASMA VORTICES - APPLICATION TO REDUCED MHD	
D. Grozev, A. Shivarova and S. Tanev	28
NONLINEAR BEHAVIOUR OF SURFACE WAVES IN PLASMA WAVEGUIDE	
I. G. Kondratyev, A. K. Kotov, A. I. Smirnov	30
ON GENERATION OF ELECTROMAGNETIC WAVES DURING NON-LINEAR INTERACTION OF SURFACE MODES IN PLASMA FILMS	
J. R. Collantes, V. A. Turikov	32
STABILITY OF WEAK DOUBLE LAYERS	
A. T. Altyntsev, N. V. Lebedev and N. A. Strokin	34
RECONNECTION IN A QUASI-NEUTRAL TURBULENT CURRENT SHEET	
A. M. Hussein	36
GENERATION AND RADIATION OF THIRD HARMONICS BY P-POLARIZED WAVE INCIDENT ON A NARROW INHOMOGENEOUS PLASMA LAYER	
V. S. Krivitsky and V. N. Tsytovich	38
NONLINEAR CONVERSION OF WAVES ENERGY IN PLASMA WITH EXTERNAL MAGNETIC FIELD	
M. Y. El-Ashry, V. I. Berezghiani and Sh. D. Pichkhadze	40
ON THE SELF-TRAPPING OF AN ELECTROMAGNETIC WAVE IN MAGNETIZED PLASMA	
D. M. Karfidov, E. B. Kuprijanova and K. F. Sergeichev	42
THE STUDY OF NON-LINEAR PENETRATION OF MICROWAVE FIELD INTO A SLAB OF DENSE PLASMA	
E. I. Toader and V. N. Covlea	44
OSCILLATORY NON-LINEAR PHENOMENA IN THE AUREOLE OF A NEON GLOW DISCHARGE	
H. Satoh, C. Ohizumi and M. Matsumoto	46
INSTABILITY AND ANOMALOUS DIFFUSION IN A MAGNETIZED POSITIVE COLUMN	
A. M. Ignatov, N. G. Gusejn-zade	48
NON-LINEAR STAGE OF DIODOTRON INSTABILITY	
N. E. Andreev, L. Ja. Margolin, K. Ja. Polonsky, L. N. Pyatnitsky	50
INITIATION OF THE PERIODICAL PLASMA STRUCTURE ON OPTICAL GAS BREAKDOWN UNDER DIFFRACTION-FREE LASER BEAM	

M. Horhager and S. Kuhn	52
WEAKLY NON-LINEAR OSCILLATIONS IN THE PIERCE DIODE WITH AN INDUCTIVE EXTERNAL CIRCUIT	
Yu. Ya. Brodsky, S. I. Nechujev, A. M. Feigin and G. M. Fraiman	54
EXPERIMENTAL INVESTIGATION OF A PLASMA RESONATOR	
A. V. Kochetov, V. A. Mironov	56
DYNAMICS OF NONLINEAR PENETRATION INTO A DENSE PLASMA	
D. Batani, V. Biancalana, I. Deha, A. Giulietti, L. Gizzi, L. Nocera, E. Schifano	58
SECOND HARMONIC IN UNDERDENSE PLASMAS FROM GASES AND THIN FILMS AND ITS ANGULAR DISTRIBUTION	
B. Meerson	60
THE ISOBARIC STRATIFICATION OF A THERMALLY UNSTABLE PLASMA: AN ANALYTICAL THEORY	
V. M. Atrazhev and I. T. Iakubov	62
REFLECTION COEFFICIENT OF A SHORTWAVE RADIATION FROM A NON-IDEAL PLASMA BOUNDARY	
N. A. Koshilev and A. A. Shishko	64
A COMPARATIVE ANALYSIS OF THE PARAMETERS OF TURBULENT CURRENT SHEETS	
V. S. Krivitsky and S. V. Vladimirov	66
COLLISION INTEGRAL IN INTERACTION OF PARTICLES WITH RESONANT AND NONRESONANT WAVES IN TURBULENT PLASMA	
M. A. Harith, V. Palleschi, A. Salvetti, M. Vaselli	68
STABILITY AND CUMULATION OF CONVERGING SHOCK WAVES FOR PLASMA CONFINEMENT APPLICATIONS	
A. B. Bud'ko	70
SELF-SIMILAR SOLUTION FOR A DISSIPATIVE CONVERGING SHOCK WAVE	
E. Ya. Kogan, A. S. Michailov, S. S. Moiseev, I. P. Zavershinsky	72
AUTOWAVE PHENOMENA IN A HIGH TEMPERATURE PLASMA	
K. Imanaliev, V. V. Pustovalov	74
TO THE THEORY OF NONLINEAR PROCESSES IN RELATIVISTIC MAGNETOACTIVE PLASMA	
F. Giammanco	76
NON-LINEAR COLLECTIVE INTERACTIONS IN TENUOUS PLASMAS	

SUBJECT AREA 9.

ELECTRODE AND SURFACE EFFECTS

- E. M. Barkhudarov, I. A. Kossyi, M. O. Mdivnishvili, I. V. Sokolov, M. I. Taktakishvili, V. E. Terekhin 78
GAS-DYNAMIC PHENOMENA ACCOMPANYING A SURFACE SPARK DISCHARGE
- I. B. Chekmarev and E. M. Sklyarova 80
THE SPHERICAL PROBE THEORY IN THE LIMIT OF EQUILIBRIUM GAS IONIZATION
- A. Ya. Ender, V. I. Sitnov 82
COLLECTOR EMISSION INFLUENCE ON THE POTENTIAL DISTRIBUTION NEAR ELECTRODES AND OTHER CHARACTERISTICS OF THE KNUDSEN DIODE WITH SURFACE IONIZATION
- F. L. Curzon and S. Mikoshiba 84
ACHIEVING STABLE REPETITION OF EXTERNAL ELECTRODE DISCHARGES
- M. Lehr, R. Korzekwa, H. Krompholz, M. Kristiansen 86
INHIBITION OF DIELECTRIC SURFACE FLASHOVER WITH MAGNETIC FIELDS FOR SPACE CONDITIONS
- P. Kulhánek, J. Maloch, K. Šobra, S. Vondráček 88
THE PLASMA ACCELERATOR ELECTRICAL RESISTANCE OF THE RAILS DURING THE ACCELERATION
- J. Piekoszewski, J. Langner, M. Gryziński, K. Czaus, E. Górski, A. Horodenski, C. Pochrybniak, J. Zaremba, W. Ziemiński 90
USE OF IONOTRON GENERATOR FOR PULSE ION DOPING AND MODIFICATION OF SOLIDS
- J. Röpcke, T. Zimdahl, W. Schlott, H. Glaefeke 92
INTERACTION PROCESSES IN AC PLASMA DISPLAYS
- N. Nedeljković, Lj. D. Nedeljković, and S. B. Vojvodić 94
THRESHOLD OF RYDBERG LEVELS POPULATION IN BEAM-FOIL INTERACTION
- H. Itoh and N. Ikuta 96
EFFECT OF SURFACE REFLECTION ON THE LIFE TIME MEASUREMENT
- D. I. Lamden, M. B. Reznikov 98
DIFFUSE DISCHARGE IN CATHODE REGION OF MOLECULAR PLASMA AFFECTED BY POTASSIUM ADSORPTION

K. U. Riemann	100
ANALYSIS OF THE ION ENERGY DISTRIBUTION AT A NEGATIVE WALL	
A. Y. Barskaya, T. V. Rudakova, O. L. Rjazantseva, L. A. Sena and V. Y. Simonov	102
POLYMER SPUTTERING BY ATOMIC BEAM OF INTERMEDIATE ENERGY	
L. I. Kiselevskii, A. I. Lyapin, V. Ya. Pivovarov	104
MODEL CALCULATIONS OF THE PROCESSES WHILE TREATING MATERIALS IN THE GAS DISCHARGES	
V. A. Bityurin, A. A. Kulikovskiy	106
ON THE MECHANISM OF CHARGE REPLENISHMENT IN THE CATHODE REGION OF ATMOSPHERIC PRESSURE GAS DISCHARGE PLASMA	
N. A. Kervalishvili	108
THE NATURE OF ANOMALOUSLY HIGH-ENERGY ELECTRONS IN THE ANODE SHEATH OF THE DISCHARGE IN CROSSED E ₁ H FIELDS	
N. A. Kervalishvili	110
ELECTRON VORTICES IN THE NONNEUTRAL PLASMA OF THE ANODE SHEATH IN THE CROSSED E ₁ H FIELDS	
A. I. Zakharov and Ya. I. Kalaidzidis	112
ELECTRODE FORM INFLUENCE ON THE COAXIAL SPARK GAP BREAKDOWN VOLTAGE	
A. V. Bolotov, A. V. Kozirev, Yu. D. Korolev	114
VACUUM ARC CATHODE PROCESSES INFLUENCED BY THE LOCAL MAXIMUM POTENTIAL	
A. V. Bushman, S. L. Leshkevitch, G. A. Mesyats, V. A. Skvortsov, V. E. Fortov	116
NUMERICAL INVESTIGATION OF THE ELECTRO-EXPLOSION OF CATHODE MICROEDGE	
B. E. Djakov	118
RUNAWAY ELECTRONS IN THE CATHODE SPOT PLASMA OF A VACUUM ARC	
Z. L. Mišković, N. N. Nedeljković, Lj. D. Nedeljković and S. B. Vojvodić	120
THEORY OF NEUTRALIZATION OF FAST PROTONS AFTER GRAZING SCATTERING FROM SURFACE	
E. E. Antonov, V. I. Popovich	122
OXYGEN PLASMA INFLUENCE ON THE RATE OF O(³ P) ATOMS RECOMBINATION ON THE GLASS SURFACES	
H. Mino	124
ARC CATHODE SPOT PARAMETERS	
N. E. Perskii, V. I. Sisyn, Y. D. Khromov	126
CATHODE SPOT DYNAMICS FOR HIGH IMPULSE CURRENT	

W. K. Shang, J. M. Wang, Q. L. Zhao	128
THE ANODE SPOT FORMATION OF VACUUM ARCS UNDER DIFFERENT KINDS OF AXIAL MAGNETIC FIELDS	
Yu. V. Krasnyak, S. Yu. Petrin, O. A. Sinkevich	130
TUNNELLING NEGATIVE IONS FORMATION AND THE MECHANISM OF CHARGE TRANSFER THROUGH THE NEAR-ELECTRODE LAYERS	

SUBJECT AREA 1.

KINETICS, THERMODYNAMICS AND TRANSPORT PHENOMENA

N. Shimura and T. Makabe	132
THREE DIMENSIONAL VELOCITY DISTRIBUTION FUNCTION OF ELECTRON SWARM IN DC AND $E \times B$ FIELDS	
H. Eizenkiet and L. Friedland	134
ELECTRON VELOCITY DISTRIBUTIONS IN PLASMAS BEYOND THE LORENZ EXPANSION	
P. J. Karditsas	136
THE ELECTRON ENERGY DISTRIBUTION FUNCTION IN HELIUM GAS WITH FLOW	
V. Škarka	138
EXPLICITLY COMPUTED SOLUTION OF THE NONLINEAR VLASOV EQUATION	
K. Makowski	140
KINETIC MODEL OF LASER SUSTAINED PLASMAS	
W. Drazek, A. Galkowski, A. Kalbarczyk	142
NUMERICAL SOLUTION OF BOLTZMANN TRANSPORT EQUATION FOR ELECTRONS IN KrF GAS LASER MIXTURES	
N. A. Gorbunov, N. B. Kolokolov, A. A. Kudryavtsev	144
MEASUREMENT OF ENERGY ELECTRON DISTRIBUTION FUNCTION IN AN INCREASED PRESSURE PLASMA BY THE PROBE METHOD	
M. Fukutoku, S. Nakajima and N. Ikuta	146
FTI ANALYSIS OF ELECTRON TRANSPORT IN RAMP MODEL GAS	
R. W. Larenz	148
LINEAR ELECTRON COLLISION OPERATOR DERIVED FROM PLASMA MICROFIELD CONSIDERATIONS	
A. H. Oien	150
PLASMA KINETIC AND TRANSPORT THEORY IN STRONG FIELDS	
J. Kreher, G. Bartolomäus, J. Wilhelm, D. Förster, W. Stern	152
KINETIC CALCULATIONS FOR POSITIVE COLUMN IN Hg/Ar MIXTURES WITH DIFFERENT RADII	

J. A. M. van der Mullen, M. C. M. van der Sanden, P. Brienesse and A. Peeters THE SAHA EQUATION IN A TWO TEMPERATURE PLASMA	154
M. C. M. van der Sanden, P. P. J. M. Schram and J. A. M. van der Mullen A GENERALIZED LAW OF MASS ACTION FOR A TWO TEMPERATURE PLASMA	156
I. Vagera PARTITION FUNCTION FOR BOUND STATES	158
M. R. Mehandjiev APPLICATION OF THERMODYNAMICS OF ACCUMULATION PROCESSES REGULARITIES IN PLASMA PHENOMENA	160
D. I. Zhukhovitskii THERMODYNAMICS OF CESIUM VAPOUR PLASMA	162
V. S. Bajović SOME THEORETICAL CONSIDERATIONS OF PLASMA ELECTRICAL CONDUCTIVITY COEFFICIENT	164
Y. Kondo, S. Ushiroda and S. Kajita DIFFUSION COEFFICIENT OBTAINED FROM ARRIVAL TIME SPECTRUM	166
V. A. Rozhansky, I. Yu. Veselova THREE-DIMENSIONAL THERMODIFFUSION IN A MAGNETIC FIELD	168
N. V. Novaković, S. M. Stojilković and B. S. Milić EVALUATION OF THE ELECTRIC CONDUCTIVITY IN PLASMAS FORMED BY THERMAL IONIZATION IN THE MIXTURES OF XENON AND SODMIUM AT HIGH PRESSURES	170
G. Röpke, R. Redmer and H. Reinholz INTERPOLATION FORMULAS FOR THE TRANSPORT COEFFICIENTS OF DENSE PLASMAS ACCOUNTING FOR MANY-BODY EFFECTS	172
R. Winkler, G. L. Braglia and J. Wilhelm IDENTIFICATION OF MAIN PROCESSES CONTROLLING THE TEMPORAL RELAXATION OF ENERGETIC ELECTRONS	174
K. F. Ness and R. E. Robson UNIFIED THEORETICAL TREATMENT OF ION AND ELECTRON TRANSPORT PROPERTIES IN GASES	176
W. Roznerski, J. Mechlinksa-Drewko, and J. Leja THE CHARACTERISTIC ENERGY AND THE RATIO OF LONGITUDINAL DIFFUSION COEFFICIENT TO MOBILITY FOR ELECTRONS IN HYDROGEN	178
J. Mechlinksa-Drewko DIFFUSION TO MOBILITY COEFFICIENT FOR ELECTRONS IN NITROGEN, CARBON AND CARBON DIOXIDE	180

W. Roznerski and K. Leja	182
THE CHARACTERISTIC ENERGY OF ELECTRONS IN CARBON DIOXIDE AT MODERATE E/N	
J. I. Londer, O. V. Pyatnitskaya, K. N. Ulyanov	184
KINETICS OF NON-STATIONARY EVAPORATION AND IONIZATION AT LARGE KNUDSEN NUMBERS	
A. I. Karchevsky and E. P. Potanin	186
INFLUENCE OF COMPONENT WITH THE HIGHEST IONIZATION POTENTIAL ON THE SEPARATION PROCESSES IN A ROTATING PLASMA	
Yu. P. Raizer, M. N. Shneider	188
SIMPLIFIED KINETIC EQUATION FOR ELECTRONS IN ARBITRARY NON-UNIFORM FIELDS AND CATHODE LAYER OF GLOW DISCHARGE	
N. Jelić, M. Čerček and T. Gyergyek	190
ON THE ELECTRON VELOCITY DISTRIBUTION IN A COLLISIONLESS PLANE DISCHARGE	
H. Wallschlager	192
KINETIC THEORY OF THE POSITIVE COLUMN FOR MEDIUM KNUDSEN-NUMBERS	
L. D. Tsendin	194
PLASMA DIFFUSION IN ELECTRONEGATIVE GASES	
B. van der Sijde, J. A. M. van der Mullen and H. M. J. Williems	196
THE TRUNCATION PROBLEM OF COLLISIONAL-RADIATIVE MODELS	
K. Matsuura, A. Nakano, Y. Ntsume and K. Shibata	198
SPECTRAL ANALYSIS OF MAGNETIC FLUCTUATION IN A PINCH DISCHARGE BY THE MAXIMUM ENTROPY METHOD	
R. Roussel-Dupre, W. T. Armstrong and T. Tunnel	200
KINETIC AND FLUID CALCULATIONS OF SPECTRAL LINE EMISSIONS OBSERVED IN AIR BREAKDOWN EXPERIMENTS	
I. A. Zhvania, Yu. S. Kostyukova, M. Z. Maksimov, V. S. Tsypin	202
THERMAL STRESS EFFECTS IN A WEAKLY IONIZED PLASMA WITH A MAGNETIC FIELD	
V. Čelebonović and W. Dappen	204
A NOTE ON THE PLANCK-LARKIN PARTITION FUNCTION	
B. Zaporowski	206
DETERMINATION OF THERMODYNAMIC PROPERTIES OF IONIZED GASES	
L. Adamec	208
MATHEMATICAL MODELLING OF CHEMICAL KINETICS OF SOME PHENOMENA IN LOW TEMPERATURE PLASMA OF SF ₆	

M. C. Bordage, P. Ségur and I. Pérès	210
CALCULATION OF IONIZATION COEFFICIENT AT HIGH E/N VALUES IN HELIUM, ARGON AND METHANE	
G. E. Bugrov, L. A. Goncharov, E. A. Kral'kina, V. A. Obuchov	212
STUDY OF NON-MONOTONOUS EEDF IN Xe LOW PRESSURE DISCHARGE	

SUBJECT AREA 18.

GENERATION AND DYNAMICS OF PLASMA FLOWS

I. Blinow, D. Drichko, G. Duzhew, M. Zhakow, S. Kasuaneko	214
PRODUCTION OF DENSE FLOWS OF FULLY IONIZED LOW-TEMPERATURE PLASMA	
S. I. Aninin, V. M. Astashinski, G. I. Bakanovich, E. A. Kostyukevich, A. M. Kuzmitski, A. A. Man'kovski, L. Ya. Min'ko	216
GENERATION OF DIRECTED PLASMA FLOWS	
Yu. I. Chutov, V. N. Podolsky, V. Yu. Palkin, V. V. Shastal	218
EXPERIMENTAL INVESTIGATION OF AN IMPULSING IONIZED GAS FLOW	
V. P. Savinov, V. G. Yakunin	220
CHARGE PARTICLES FLOWS DYNAMICS TO HF DISCHARGE ELECTRODE	
A. A. Temeev	222
FEATURES OF PLASMA FLOW INTERACTION WITH THE TRANSVERSE MAGNETIC FIELD	
A. I. Morzov, A. Yu. Voloshko, I. E. Garkusha, O. E. Kazakov, D. G. Solyakov, V. I. Tereshin, S. A. Trubchaninov, M. A. Tiarov, A. V. Tsarenko and V. V. Chebotarev	224
INVESTIGATION OF A HIGH-POWER COAXIAL QUASI-STEADY-STATE PLASMA ACCELERATOR WITH MULTIROD ELECTRODES	
V. G. Sokolov, S. Yu. Taskaev, G. I. Fixel, V. E. Chupriyanov	226
INTENSE PLASMA STREAMS TRANSPORT IN NON-HOMOGENEOUS MAGNETIC FIELDS	
M. K. Asanaliyev, Zh. Zh. Zheenbaev, K. K. Makesheva, V. M. Leliovkin, V. F. Semionov	228
STUDING OF TWO-JET PLASMATRON CHARACTERISTICS	
A. Brunet and F. Faure	230
EQUILIBRIUM POTENTIAL OF A MISSILE PROPELLED BY A ROCKET MOTOR	
A. A. Kabantsev and S. Yu. Taskaev	232
SUPPRESSION OF THE BALLOONING MODES INSTABILITY OF THE PLASMA STREAM BY RADIAL CURRENTS	

A. Kuzovnikov, S. Martishin, V. Swiridkina, A. Sukhov, V. Tarasova	234
THE INFLUENCE OF HYDRODYNAMIC PERTURBATIONS ON DYNAMIC OF THE Ar PLASMA CHARGED COMPONENT	
H. M. Soliman and M. M. Masoud	236
INFLUENCE OF A TRANSVERSE MAGNETIC FIELD ON THE AXIAL DISCHARGE PLASMA	
M. G. Grothaus and K. W. Zieher	238
EXPERIMENTAL INVESTIGATION OF A PLASMA EDGE CATHODE SCHEME	
A. V. Gurevich and Yu. V. Medvedev	240
DECAY OF A VELOCITY DISCONTINUITY IN THE KINETIC OF A COLLISIONLESS PLASMA	
S. I. Anisimov and Yu. V. Medvedev	242
DECAY OF A PLASMA CLOUD IN AN EXTERNAL ELECTRIC FIELD	
Yu. I. Chutov, A. Yu. Kravchenko, A. V. Drovalev	244
EXPANSION OF PLANE LAYER OF COLLISIONLESS PLASMA INTO A VACUUM	
Yu. A. Muromkin, A. I. Myachikov, A. L. Ustinov and A. V. Chepkasov	246
EXPERIMENTAL INVESTIGATION OF HYDRODYNAMIC CHARACTERISTICS OF THE POWERFUL DISCHARGE IN CROSSED E ₁ B FIELDS	
G. F. Abdrashitov, A. V. Beloborodov, V. V. Kubarev, V. I. Volosov, Yu. N. Yudin	248
EXPERIMENTS WITH A ROTATING PLASMA ON THE PSP-2 DEVICE	
S. V. Nikonov, A. V. Rykhlov, M. A. Vlasov, A. V. Zharinov	250
INTENSE ELECTRON FLOW IN THE IONIZED GAS IN THE EXTERNAL ELECTRIC FIELD	
A. V. Burdakov, Yu. I. Deulin, A. Kapitonov, V. S. Koidan, A. A. Kondratyev, V. V. Konukhov, S. V. Lebedev, A. G. Makarov, K. I. Mekler, V. S. Nikolaev, S. S. Perin, V. V. Postupaev, E. P. Semenov, M. V. Tauber and S. G. Vorpaev	252
PRODUCTION OF 7 M-LONG PLASMA COLUMN IN A METALLIC CHAMBER IN A STRONG MAGNETIC FIELD	
A. A. Kabantsev and S. Yu. Taskaev	254
MHD - INSTABILITY OF THE HOLLOW CYLINDRICAL PLASMA STREAM	
N. Rudraiah and I. F. Mudagall	256
EFFECT OF MAGNETIC FIELD ON ONSET OF CONVECTIONS DRIVEN BY TEMPERATURE AND CONCENTRATION DEPENDENT SURFACE TENSION	