

**Plasma 2014 - Poster / Oral Papers**  
**BASIC PLASMA**

No.	ID	Title	Primary Author	Tracks	Type
1	13	Study of role of Toroidal Field Topology on Flow and Fluctuation in Simple Toroidal Device	Mr. KUMAR, Umesh	BPE	Poster
2	14	Arbitrary Amplitude Kinetic Alfvén Solitons in a Dusty Plasma with a q-Nonextensive Electron Velocity Distribution	Mr. AHMED, Monzurul Kader	BPT	Poster
3	20	Analytical Estimate Of Phase Mixing Time Of Longitudinal Akhiezer - Polovin Wave	Mr. MUKHERJEE, Arghya	BPT	Poster
4	30	Interaction mechanism between dust grains in presence of asymmetric ion flow	Mr. BHATTACHARJEE, Saurav	BPT	Poster
5	34	Effect of Trapped particle nonlinearity on Ion Acoustic Wave	Mr. MANDAL, Debraj; SHARMA, Devendra	BPT	Poster
6	40	SPECTROSCOPIC INVESTIGATION OF HIGH DENSITY PLASMA BEAM WITH N <sub>2</sub> /H <sub>2</sub> GAS MIXTURES	Ms. MOHAN, Parvathi	BPE	Poster
7	42	Ion-Acoustic Dressed Solitons in Electron-Positron-Ion Plasma With Nonisothermal Electrons	Dr. PARVI, Parveen Bala	BPT	Poster
8	44	DISPERSION RELATION ON ALFVEN WAVES IN MULTI-COMPONENT MAGNETO-PLASMA	Mr. VISHNU PRASAD AHIRWAR, Vishnu	BPT	Poster
9	47	Self Consistent Kinetic Trajectory Simulation Model For Magnetized Plasma Sheath(1d3v).	Mr. CHALISE, Roshan	BPT	Poster
10	51	Polarization Reversal Of Helicon Wave In Nonuniform Plasma	Mr. YADAV, Sonu; CHATTOPADHYAY, Prabal	BPE	Poster
11	55	ARBITRARY AMPLITUDE KINETIC ALFVEN SOLITARY WAVES IN A PLASMA WITH TWO-TEMPERATURE ELECTRONS	Dr. LATIKA KALITA, Latika	BPT	Poster
12	60	Solitary Kinetic Alfvén Waves In A Plasma With Negative Ions	Dr. GHOSH, Basudev	BPT	Poster
13	73	Vlasov-Poisson Systems and Collisionless Plasmas - Towards Langmuir Turbulence	Ms. TRIVEDI, Pallavi	BPT	Poster
14	98	Effect of Transverse Magnetic Field on Bursian Diode	Mr. PRAMANIK, Sourav	BPT	Poster
15	102	Phase-mixing of Lower-Hybrid Oscillations in Cold Plasmas	Dr. MAITY, Chandan	BPT	Poster
16	103	Amplitude Modulation Of Ion-Acoustic Solitary Waves In Fully Relativistic Two-Component Plasma	Dr. GHOSH, Basudev	BPT	Poster
17	111	Investigations of Chaotic Transitions in Argon and Neon Gas Discharges	Mrs. PHILIP, Anu	BPE	Poster
18	126	Temporal evolution of linear kinetic Alfvén waves in inhomogeneous magnetized plasma and generation of turbulence	Mr. GOYAL, Ravinder	BPT	Poster
19	133	Intermittency Route to Chaos and Back In Simple Diode Plasma Device	Mr. ALEX, Prince	BPE	Poster
20	134	A Model for the Calculation N <sub>2</sub> <sup>+</sup> and H <sub>2</sub> <sup>+</sup> ion influx at the cathode surface in N <sub>2</sub> -H <sub>2</sub> discharge	Dr. SINHA, Suraj	BPE	Poster

**Plasma 2014 - Poster / Oral Papers**  
**BASIC PLASMA**

21	137	ARBITRARY AMPLITUDE DUST KINETIC ALFVEN SOLITARY WAVES IN A PLASMA WITH $\beta$ -DISTRIBUTED ELECTRONS	Mrs. CHAHARIA, Rumi	BPT	Poster
22	150	Ion-acoustic solitons in warm magnetized electron-positron-ion Plasma	Mr. JAIN, Surendra	BPT	Poster
23	151	Modulational instability of ion acoustic waves in dusty plasma with two-electron temperature distribution	Mr. JAIN, Surendra	BPT	Poster
24	153	Kolmogorov Flows in 2D strongly coupled complex Plasmas	Ms. GUPTA, Akanksha	BPT	Poster
25	154	Inverse Mirror Plasma Experimental Device (IMPED)- A magnetized linear plasma device with a wide Operating Range for Wave Studies	Mr. BOSE, Sayak	BPE	Poster
26	165	Measurement of Ion flow velocities at the sheath boundary using Ion Doppler Shift Spectroscopy in low temperature Plasmas	Mr. KELLA, Vara Prasad	BPE	Poster
27	166	Wave launching experiment in ion cyclotron frequency range	Mr. CHOWDHURY, Satyajit	BPE	Poster
28	171	Synchronization of Self Oscillatory Oscillations Between Two DC Glow Discharge Plasmas	Mr. CHAUBEY, Neeraj	BPE	Poster
29	175	INVESTIGATION OF DYNAMICS IN A DC PLASMA TORCH	Ms. GOYAL, Vidhi	BPE	Poster
30	196	On the Effect of Base Pressure on Plasma Containment	Mr.G. SAHOO	BPE	Poster
31	197	Electric Potential In A Plasma Consisting Of Finite Temperature Negative Ions Produced From Cs- Coated Dust Particles	Ms. PHUKAN, Ananya	BPT	Poster
32	202	Drift Waves in Arbitrary Mass Ratio Plasma	Mr. KARMAKAR, Mithun	BPT	Poster
33	213	On the Magnets for the Multi Cusp Magnetic Field for Confining Quiescent Alkali Plasma	Mr. PATEL, Amitkumar D.	BPE	Poster
34	223	Inhomogeneous downstream plasma in an expanding radio-frequency plasma system	Mr. GHOSH, Soumen	BPE	Poster
35	236	OBSERVATION OF ELECTRON TEMPERATURE GRADIENT IN MAGNETIZED PLASMA COLUMN	KARKARI, Shantanu	BPE	Poster
36	238	Global Transition From Drift Wave Dominated Regimes To Multi-instability Plasma Dynamics And Simultaneous Formation Of A Radial Transport Barrier	Dr. CHAKRABORTY THAKUR, Saikat	BPE	Poster
37	239	STUDIES OF THE ROLE OF DIAMAGNETIC DRIFT ON PLASMA DIFFUSION ACROSS A TRANSVERSE MAGNETIC FIELD	Ms. HAZARIKA, Parismita	BPE	Poster
38	245	Nonlinear analysis of Floating Potential fluctuation using Laser Heated Emissive probe developed under National fusion program	Ms. MITRA, Vramori	BPE	Poster
39	251	Extremely Long High Enthalpy Air Plasma Jet: A New Paradigm Of Air Torch Operation	Dr. GHORUI, Srikumar	BPE	Poster
40	252	Unique Erosion Features In Hafnium Electrode Plasma Torches: A Chemical And Microstructural Investigation	Dr. GHORUI, Srikumar	BPE	Poster
41	253	Arc Root Movement And Plasma Jet Instability: Direct Probing Through Simultaneous Voltage Traces And Double Exposure Fast Photography	Dr. GHORUI, Srikumar	BPE	Poster

**Plasma 2014 - Poster / Oral Papers**  
**BASIC PLASMA**

42	254	STUDIES ON BIO POLYMER COATED VISCOSE FABRIC USING LOW TEMPERATURE OXYGEN PLASMA	Mr. N, Karthikeyan	BPE	Poster
43	259	Precision Control & Monitoring Of Heat Pipe Oven Temperature Using MODbus Protocol on LabVIEW® for the Plasma Wakefield Accelerator Source	Ms. BHATT, Pooja	BPE	Poster
44	260	Vapour Density Diagnostics For The IPR-PWFA Lithium Heat Pipe Oven	Mr. KIZHUPADATHU KRISHNAN, Mohandas	BPE	Poster
45	263	SOLITARY WAVE SOLUTIONS OF MODIFIED KADOMTSEV-PETVIASHIVILI EQUATION FOR HOT ADIABATIC DUSTY PLASMA HAVING NON-THERMAL IONS WITH TRAPPED ELECTRONS	Mr. NARAYAN DEV, Apul	BPT	Poster
46	266	Study Of Polarization Bremsstrahlung From keV-Electrons Incident On a Dilute Gaseous Target	Prof. SHANKER, Rama	BPE	Poster
47	278	ELECTRICAL TECHNIQUE TO IMPROVE ANOMALOUS DIFFUSION ACROSS A TRANSVERSE MAGNETIC FIELD	Mr. DAS, Bidyut	BPE	Poster
48	279	EFFECTS OF MAGNETIC FIELD ON SELF-DIFFUSION IN TWO-DIMENSIONAL YUKAWA SYSTEMS	Ms. BEGUM, Mahmuda	BPT	Poster
50	280	ELECTRON ACOUSTIC SOLITARY STRUCTURES IN A PLASMA WITH HOT ELECTRONS FEATURING TSALLIS DISTRIBUTION	Ms. DHANJAL, Ramandeep Kaur	BPT	Poster
49	288	Study of Fractality Nonlinear Oscillations in DC Glow Discharge Magnetised Plasma Using Detrended Fluctuation Analysis	Mitra .V	BPT	Poster
51	291	EXPERIMENTAL OBSERVATION OF CHAOTIC BURSTING TO CHAOTIC SPIKING IN A GLOW DISCHARGE PLASMA	Mr. SHAW, Pankaj Kumar	BPE	Poster
52	294	Observation of High Amplitude Ion Acoustic Peregrine Soliton in Multicomponent Plasma with Negative Ions	Ms. PATHAK, Pallabi	BPE	Poster
53	302	Design of a Line Type Pulsed Modulator for S band Magnetron for SYMPLE.	Ms. RATHOD, Priyavandna	BPE	Poster
54	325	Conceptual design of a permanent ring magnet based Helicon plasma source.	Dr. BANDHYOPADHYAY, Mainak	BPE	Poster
55	327	Determination of RF and Extractor power supply parameters for the Helicon plasma source system	Mr. NARAYAN, Sharma	BPE	Poster
56	352	Observation of Pressure Gradient Driven EMHD Turbulence in Assymmetric Electron Belt Plasma of LVPD	Mr. SANYASI, Amulya Kumar	BPE	Poster
57	353	RESISTIVE WALL DESTABILIZATION OF ELECTRON PLASMAS IN SMARTEX-C	Mr. LACHHVANI, Lavkesh	BPE	Poster
58	354	A Physical Model Explaining ETG Suitable Plasma in LVPD by EEF Field Modulation	Mr. SANYASI, Amulya Kumar	BPE	Poster
59	355	Fluctuation Induced Particle Flux in the background of ETG plasma: Possible case of Intermittency	Mr. SRIVASTAVA, Prabhakar	BPE	Poster
60	359	Interface Software development, integration and Performance results of the High Current Power Supply in Large Volume Plasma Device	Mr. SUGANDHI, Ritesh	BPE	Poster

**Plasma 2014 - Poster / Oral Papers**  
**BASIC PLASMA**

61	360	Architecture of Control and Data Acquisition System of Applied Plasma Physics Experiments in Linear Device	Mr. SUGANDHI, Ritesh	BPE	Poster
62	361	Dust Acoustic (DA) Waves In A Magnetised Plasma With Boltzmann Distributed Electrons And Ions	Ms. CHOUDHURY, Mamani	BPT	Poster
63	362	ANALYSIS OF KINETIC ENERGY OF ION AND ELECTRON IN MAGNETIZED PLASMA SHEATH	Mr. RAJ ADHIKARI, Bhesh	BPT	Poster
64	374	Surface Modifications of natural Kanchipuram Silk (Pattu) Fibres using Glow Discharge Plasma	Ms. K, Vinisha Rani	BPE	Poster
65	377	DISPERSION RELATION ON ALFVEN WAVES IN MULTI-COMPONENT MAGNETO-PLASMA	Mr. VISHNU, Vishnu Prasad Ahirwar	BPT	Poster
66	400	A Novel Approach to the Study of Hysteresis, and Negative Resistance in Glow Discharge Plasma	Mr. KUDACKACHIRAKUNNEL, Prijil	BPE	Poster
67	406	INVESTIGATION OF NONLINEARITY IN A PLASMA AND A NON-PLASMA DEVICE	Dr. LAHIRI, Sudeshna	BPE	Poster
68	410	Characterization of Ionizer hot plate for Multi-Cusp Plasma Device (MPD)	Mr. SHAIKH, Zubin	BPE	Poster
69	424	Hysteresis Effects And Characterization Of Floating Potential Oscillation Amplitudes In A Co-axial Electrode Geometry	Mr. KUMAR, Rahul	BPE	Poster
70	429	Studies of Wave Phenomena in Plasma in a Diverging Magnetic Field	Mr. GHOSH, Abhijit	BPE	Poster
71	444	Mixed mode oscillations in Glow discharge plasma	Mr. GHOSH, Sabuj	BPE	Poster
72	461	Electrostatic Excitations In Beam-Plasma Interaction And Complex Plasmas: A Review Of Research Work	Prof. SAINI, Nareshpal Singh	BPT	Poster
73	467	Investigation Of Nonlinearity In Presence of external forcing and magnetic field in DC glow discharge plasma	Mr. SAHA, Debajyoti	BPE	Poster
74	493	A Polynomial Regression Model for Predicting Storm Time Dst Index Using vBz As Input	Dr. REMANAN, Remya	BPT	Poster
75	494	PARTICLE IN SIMULATION OF BUNEMAN INSTABILITY	Mr. RAJAWAT, Roopendra Singh	BPT	Poster
76	495	Study on Discharge Dynamics in an Atmospheric Pressure Dielectric Barrier Discharge	Dr. KAUSIK, S.s.	BPE	Poster
77	497	EVOLUTION OF RELATIVISTIC ELECTRON CURRENT BEAM IN A COLD PLASMA	Mr. RAJAWAT, Roopendra Singh	BPT	Poster
78	507	Ion-Acoustic Double-Layer in an Inhomogeneous Plasma	Dr. GHAI, Harvinder Kaur	BPT	Poster
79	512	DISSIPATIVE SOLITONS IN PAIR-ION PLASMAS	Mr. ADAK, Ashish	BPT	Poster
80	514	MODIFIED BURGERS EQUATION AND HIGHER ORDER MODIFIED BURGERS EQUATION IN HOT ADIABATIC DUSTY PLASMA WITH A NEGATIVE ION RICH NON-THERMAL ION AND TRAPPED ELECTRON	Dr. NIRAB, Nirab Ch. Adhikary	BPT	Poster
81	516(I)	Field Limitations Of The Applicability Of Local Approximation For EDF In High Pressure Plasmas	A.A. Kudryavtsev, K.D. Kapustin, and M.B. Krasilnikov	BPT	Poster

**Plasma 2014 - Poster / Oral Papers**  
**BASIC PLASMA**

82	517(I)	The Role Of Current Filaments In A Long Spark In Air	A.V. Oginov, A.A. Rodionov, K.V. Shpakov	BPE	Poster
83	518(I)	ORTHOGONAL SYMMETRIC DISCHARGE SYSTEM	Pavel Studenovský	BPE	Poster
1	196	On the Effect of Base Pressure on Plasma Containment	Mr. SAHOO, Gourishankar	BPE	Oral
2	288	Study of Fractality of Nonlinear Oscillations in DC Glow Discharge Magnetised Plasma by using Detrended Fluctuation Analysis	Ms. MITRA, Vramori	BPE	Oral

POSTER 83

ORAL 2