

Plasma 2014 - Poster / Oral Papers
NUCLEAR FUSION (NF)

No.	ID	Title	PrimaryAuthor	Tracks	Type
1	16	Development of Beam Diagnostic for 400 MeV Proton Beam Intensity Using Chromox-6 Scintillation Screen at Fermilab MuCool Test Area	Dr. JANA, Mukti Ranjan	NFE	Poster
2	25	DEVELOPMENT AND OPERATION OF A FLEXIBLE TRANSMISSION LINE BASED NOVEL 17 KJ CAPACITOR BANK WITH MATCHING PLASMA FOCUS DEVICE	ROUT, Rabindra	NFE	Poster
3	65	Study of impurities in vacuum vessel in different campaigns of SST-1	Mr. DHANANI, Kalpeshkumar	NFE	Poster
4	72	DAC Controlled Voltage Variable RF Attenuator For Generating RF Pulses of Different Shapes and Amplitudes For ICRH System.	Mr. SINGH, Manoj	NFE	Poster
5	74	Helium Ion Irradiation On The Materials Relevant To Fusion Research	Mr. DUTTA, Nilam Jyoti	NFE	Poster
6	75	Development Of IECF Based Linear Neutron Source At CPP-IPR And Its Current Status	Mr. BUZARBARUAH, Neelanjan	NFE	Poster
7	77	RF Pulse Control for ICRH Heating Experiment in ADITYA	Mr. JADAV, Hiralal	NFE	Poster
8	78	ICRH DAC Software Modifications for ICRH Experiments in ADITYA	Mr. JOSHI, Rameshkumar	NFE	Poster
9	80	High temperature vacuum baking of PFC graphite tiles of SST-1	Mr. GATTU, Ramesh Babu	NFE	Poster
10	81	Commissioning of 10kV,7A HVDC Integrated Power Supply for Triode based 20KW stage CWRF amplifiers.	Mr. PARMAR, Kiritkumar Maganbhai	NFE	Poster
11	82	Commissioning of Integrated Power Supply (15kV, 28A and three auxiliary supplies) for Testing of 200kW stage CWRF Amplifiers	Mr. KADIA, Bhavesh; Mr. YELLAMRAJU, S S Srinivas	NFE	Poster
12	83	Design and Development of Protection Circuits for High voltage Power Supplies used in various stages of 1.5 MW CWRF Amplifier	Mr. KADIA, Bhavesh; Mr. YELLAMRAJU, S S Srinivas	NFE	Poster
13	84	Development, Testing and Integration with DAC of 450 A DC Filament Power Supply for 200 kW CWRF Amplifier	Mr. KADIA, Bhavesh; Mr. PARMAR, Kiritkumar Maganbhai	NFE	Poster
14	86	2D Thermal Design Validation of Use Beryllium as Plasma Facing Material and CuCrZr as Heat Sink Material for ITER Shield Blanket Module First Wall	Mr. SRIVASTAVA, Ritesh Kumar	NFT	Poster
15	96	Study The Effect OF Thermal Cyclic On SS316L To CuCrZr Brazed Joint Sample	Dr. SINGH, Kp	NFE	Poster
16	109	Glow discharge wall conditioning system of SST-1	Mr. RAVAL, Dilip	NFE	Poster
17	110	THE ROLE OF $E \times B$ FLOWS ON GLOBAL LINEAR MICROINSTABILITIES	Mr. VERMA, Deepak	NFT	Poster
18	119	Dynamic Heater System For Controlling The Temperature Of Turbines Bearing In SST-1 Helium Cryogenic System	Mr. DIKENS, Christian	NFT	Poster
19	120	Upgradation of Control System for the SST-1 LN2 Shield Distribution after Valve Box Installation	Mr. GAURANG, Mahesuria	NFT	Poster

Plasma 2014 - Poster / Oral Papers
NUCLEAR FUSION (NF)

20	121	Drift Kinetic Equations (DKE) and Neoclassical Transport	Dr. BORA, Madhurjya	NFT	Poster
21	124	Effect on Electrostatic and Magnetic Fluctuations Due to Biased Electrode in ADITYA Tokamak	Mr. DHYANI, Pravesh	NFE	Poster
22	125	HIGH-CURRENT LONG-PULSE PLASMA DISCHARGES IN ADITYA TOKAMAK	Mr. TANNA, R.I.	NFE	Poster
23	127	Role Of Sacrificial Layer On Picosecond Laser Shock Peening Of Stainless Steel Surfaces	Dr. P, Prem Kiran	NFE	Poster
24	135	Effects of quasi-periodic variation in 3D EMC3-EIRENE SOL plasma transport simulation of tokamak Aditya	Mr. SAHOO, Bibhu Prasad	NFT	Poster
25	139	Design and Test Results of a 200kV, 15mA High Voltage Power Supply	Mr. SOMAN, Amal	NFE	Poster
26	149	Design of the ITER IN-DA ECE Diagnostic Transmission Line Layout and Support Structures	Mr. THOMAS, Sajal	NFT	Poster
27	159	Implementation Of DEGAS2 Code To Study The Neutral Particle Transport In Aditya Tokamak And Its Initial Results	Dr. DEY, Ritu	NFT	Poster
28	162	Plasma-wall Interactions in Presence of Fusion Neutrons- A Modelling Perspective	Dr. P.N., Maya	NFT	Poster
29	170	Automation and Control for Offline Impedance Matching using PLC and LABVIEW for ICRH Transmission line in SST-1	Mr. ANIRUDDH, Aniruddh; Mr. RAMESH, Ramesh Joshi; Ms. KRUPA, Krupa Mehta	NFE	Poster
30	178	STRUCTURAL ASSESSMENT OF MANUFACTURING MODEL OF ITER-CRYOSTAT LOWER CYLINDER, UPPER CYLINDER AND TOP-LID	Mr. BHATTACHARYA, Avik	NFT	Poster
31	179	Prototype High Voltage Bushing: Design and Development	Dr. SHAH, Sejal	NFE	Poster
32	184	Engineering Design of PLC Based Control and Monitoring for 100kW, 45.6 MHz ICRH DAC	Ms. KRUPA, Krupa Mehta; Mr. RAMESH, Ramesh Joshi; Mr. ANIRUDDH, Aniruddh Mali	NFE	Poster
33	188	Estimation of Hard X-Ray flux using MCNP for the Runaway Electrons produced in ITER Hydrogen-Phase	Mr. MAKWANA, Rajnikant	NFT	Poster
34	192	Study Of Castelled Divertor Gaps	Mr. ADHIKARI, Sayan	NFT	Poster
35	212	Pre-Assembly Tests of 80 K Booster Systems Cryostats and VJ lines	Mr. PATEL, Rakeshkumar	NFE	Poster
36	217	OVERVIEW OF INSTRUMENTATION & CONTROL SYSTEM FOR ITER VACUUM VESSEL PRESSURE SUPPRESSION SYSTEM	Mr. SHUKLA, Dileep	NFT	Poster
37	232	Studies On Keyhole Plasma Characteristics During Laser Welding With Optical Emission Spectroscopy	Mr. BUDDU, Ramesh Kumar	NFE	Poster

Plasma 2014 - Poster / Oral Papers
NUCLEAR FUSION (NF)

38	246	Implementation of soft start logic in ECRH DAC for smooth rise of HV in RHVPS for reliable operation of High Power Gyrotrons	Mr. PATEL, Jatinkumar	NFE	Poster
39	247	Mode Analysis to Study Waves & Instabilities as an Agent for Plasma Non-Uniformity in Negative Ion Sources.	Mr. KUMAR, Dass Sudhir	NFT	Poster
40	273	STRUCTURAL ASSESSMENT OF MANUFACTURING MODEL OF CRYOSTAT BASE SECTION	Mr. JOGI, Gaurav	NFT	Poster
41	277	FABRICATION METHODOLOGY OF ITER CRYOSTAT	Mr. GUPTA, Girish Kumar	NFT	Poster
42	283	HIGH SPEED FIBER OPTICS DATA LINK FOR ANALOG SIGNAL, USING AURORA PROTOCOL	Mr. UPADHYAY, Jatin	NFE	Poster
43	287	Design and integration of Second Calorimeter for Neutral Beam Indian Test Facility (INTF)	Mr. PILLAI, Suraj	OAT	Poster
44	289	The operation of cryo-condensation pumps with NBI helium cryoplant	Mr. PANDYA, Bhargav; Mr. SAHU, Ananta; Dr. VATTIPELLE, Prahlad	NFE	Poster
45	292	Thermo-mechanical Analysis of Heat Transfer Elements (HTEs) of Second Calorimeter for Neutral Beam Indian Test Facility (INTF)	Mr. MISTRY, Chirag	OAT	Poster
46	303	Automation of Antenna-Plasma Impedance Determination and Matching in Aditya and SST-1 for ICRH	Ms. MASI MAMMADBHALI, Kanijfatema Masi	NFE	Poster
47	308	Qualification of Liquid Penetrant Examination (LPE) Consumables for ITER Cryostat	Mr. PALALIYA, Amit Kumar	NFE	Poster
48	310	Development of 35 kW HV power supply for 8kW ICRF amplifier of ring resonator	Mr. MOHAN, Kartik	NFE	Poster
49	321	AUTOMATIC GAS-FEED CONTROL SYSTEM FOR VACUUM VESSEL	Mr. PATEL, Kiran	NFE	Poster
50	322	MgB ₂ -Brass Joint Resistance Optimization for SST-1 Superconducting Magnet Current Leads	Mr. PRASAD, Upendra	NFE	Poster
51	323	FLUID SIMULATION OF THE DRIFT TEARING INSTABILITY	Mr. MENDONCA, Jervis; Dr. CHANDRA, Debasis	NFT	Poster
52	324	DESIGN AND DEVELOPMENT OF WATER COOLING SYSTEM FOR HIGH HEAT FLUX TEST FACILITY AT IPR	Mr. KIDAMBI, Rajamannar Swamy	NFE	Poster
53	326	“ CONCEPTUAL DESIGN, DEVELOPMENT AND PROCUREMENT OF LT POWER DISTRIBUTION SYSTEM FOR TWIN SOURCE”	Mr. PARMAR, Kanubhai	NFE	Poster
54	330	ANALYSIS OF THE CONTAMINATED OPTICAL VIEWPORTS MOUNTED ON THE ADITYA TOKAMAK	Ms. RAMAIYA, Nilam; Dr. CHOWDHURI, Malay Bikas; Mrs. MANCHANDA, Ranjana	NFE	Poster
55	331	Control and Data Acquisition System for Characterization of Microwave Components for ECE Diagnostics in ITER-INDIA Lab.	Mr. RAULJI, Vismaysinh	NFE	Poster

Plasma 2014 - Poster / Oral Papers
NUCLEAR FUSION (NF)

56	332	Overview of Indian LLCB TBM program and R&D activities	Dr. BHATTACHARYAY, Rajendraprasad	NFE	Poster
57	333	Ethernet Based, Frequency-Programmable Sweep Generator for Langmuir Probe Biasing	Mrs. GAUTAM, Pramila	NFE	Poster
58	334	Design and Development of Multi Channel Signal Conditioning System for Soft Xray Imaging Camera in Aditya Tokamak	Mrs. SHUKLA, Praveena Kumari	NFE	Poster
59	335	Automation of Aditya test stand vacuum facility using Siemens S7- 300 PLC	Mr. ARAMBHADIYA, Bharatkuamar	NFE	Poster
60	336	Design, Implementation and Optimization of High Speed Ethernet Network for I&C interfacing at High Heat Flux Test Facility	Mr. SUGANDHI, Ritesh	NFE	Poster
61	339	Preliminary design of 4kV, 1A series connected IGBT switch for Triode based ICRH amplifier protection	Mr. MANDEEP, Mandeepsingh Chhabada	NFE	Poster
62	344	Engineering Design of Beam Transmission Duct and Shine-Through armor for SST-1	Mr. SIDIBOMMA, Rambabu	NFE	Poster
63	345	Digital Signal Processing on FPGA for Plasma Diagnostics	Mr. MANDALIYA, Hiteshkumar	NFE	Poster
64	348	STRUCTURAL FABRICATION: STUDY OF INFRASTRUCTURE FACILITIES REQUIRED TO CONVERT CONCEPT TO REALITY	Mr. VADOLIA, Gautam	NFE	Poster
65	365	Recent Result of Better Plasma Performance Using Lithium Coating in Aditya Tokamak	Mr. JADEJA, Kumarpalsinh	NFE	Poster
66	367	Design, Fabrication, Assembly, Installation and Testing of the Beam Intercept for Negative Ion Beam Profile Measurement in ROBIN	Mr. PANDYA, Kaushal	NFE	Poster
67	368	Vacuum Vessel baking of Aditya tokamak for improved plasma Operation	Mr. PATEL, Kaushal	NFE	Poster
68	370	A Tritium Transport Model For Lead Lithium Cooled Ceramic Breeder (LLCB) Test Blanket Module (TBM) System	Ms. BRAHMBHATT, Priyanka	NFT	Poster
69	371	Design And Analysis Of Sparger For Hydrogen Isotopes Saturation In Liquid Lead Lithium	Mr. RAI, Sudhir	NFT	Poster
70	372	Design of Cryogenic Molecular Sieve Bed adsorber system for Hydrogen Isotopes Removal System	Ms. V., Gayathri Devi	NFT	Poster
71	373	Design And Development Of A Cold Trap For Regeneration Of Atmospheric Molecular Sieve Bed In Hydrogen Isotope Removal System	Mr. YADAV, Deepak	NFT	Poster
72	380	Fabrication, Testing & Commissioning of Electrical Interfaces as a Test Facility at ITER-India Lab for ITER like R&D ICRF Source	Mr. , Gajendra	NFE	Poster

Plasma 2014 - Poster / Oral Papers
NUCLEAR FUSION (NF)

73	383	Safety Key Lock management system at ITER-India Lab for overall during testing of ITER like R&D ICRF source	Mr. ANAND, Rohit	NFE	Poster
74	384	An Overview of Coaxial Transmission Line Components for ITER ICH&CD System	Ms. MACHCHHAR, Harsha	NFE	Poster
75	385	Conceptual Design and Development Status of Mis-Match Transmission Line (MMTL) to Test RF Power Sources for ITER ICH&CD System	Mr. SINGH, Raghuraj	NFE	Poster
76	386	Development, Testing and Integration of signal conditioning board with Local Control Unit of R&D ICRF source	Mr. KUMAR, Rajnish	NFE	Poster
77	388	Data Acquisition and Control System for the set-up of New High Heat Flux Test Facility at IPR	Mr. BELSARE, Sunil	NFE	Poster
78	390	Exploring the capability of ATTILA code along with its FURNAX Activation and Transmutation Data Base for Dose Rate Calculations in ITER like Geometry	Mr. AGGARWAL, Deepak	NFT	Poster
79	391	PARAMETRIC STUDY OF RESIDUAL STRESSES IN MULTIPASS WELDING FOR A FUSION GRADE REACTOR	Mr. MANUELRAJ, Manoahstephen	NFT	Poster
80	392	ENGINEERING METHODOLOGY FOR BOLT DESIGN OF IN-VESSEL STRUCTURE FOR A FUSION GRADE REACTOR	Mr. MANUELRAJ, Manoahstephen	NFT	Poster
81	395	ENGINEERING DESIGN METHODOLOGY OF END AND CENTRAL SUPPORT FOR IN-VESSEL STRUCTURE FOR A FUSION GRADE REACTOR	Mr. NAGARAJAN, Ravi Prakash	NFT	Poster
82	398	Activation Analyses of Indian-LLCB TBM-set for ITER Irradiation Scenarios	Mr. SHAW, Akshaya Kumar	NFT	Poster
83	411	PIPING FLEXIBILITY ANALYSIS OF HIGH PRESSURE HIGH TEMPERATURE EXPERIMENTAL HELIUM COOLING LOOP	Mr. VERMA, Aditya Kumar	NFE	Poster
84	412	ISOLATED ANALOGUE SIGNAL MEASUREMENT UNITS WITH HIGH SPEED VOLTAGE TO FREQUENCY CONVERTERS	Mr. PATEL, Tejas	NFE	Poster
85	418	Improved Electronics for Langmuir Probe Diagnostics for APPELL Device	Mr. HANSALIA, Chandresh	NFE	Poster
86	421	PRELIMINARY DESIGN OF INSTRUMENTATION & CONTROL FOR EXPERIMENTAL HELIUM COOLING SYSTEM	Mr. TIRUMALASHETTI, Srinivas Rao	NFE	Poster
87	422	Effect of bending strain on critical current of YBCO, BSCCO and Di-BSCCO high temperature superconducting tapes	Mr. RAJ, Piyush	NFE	Poster
88	423	TESTING OF PROCESS SENSORS FOR HIGH TEMPERATURE LIQUID METAL APPLICATIONS	Mr. SARASWAT, Abhishek	NFE	Poster
89	425	1-D NEUTRONIC SHIELDING ANALYSES FOR ITER LIKE FUSION DEVICES	Mr. SWAMI, H L	NFT	Poster
90	426	A COMPARATIVE STUDY ON FUSION REACTOR/ITER STRUCTURAL MATERIALS ACTIVATION ANALYSES	Mr. SWAMI, H L	NFT	Poster

Plasma 2014 - Poster / Oral Papers
NUCLEAR FUSION (NF)

91	427	Spectroscopic observation in SST-1 Tokamak	Mrs. MANCHANDA, Ranjana	NFE	Poster
92	428	Signal Conditioning And Integrator Electronics For Hard X-Ray Flux/Intensity Measurement Diagnostic In Aditya Tokamak	Ms. SHAH, Minsha	NFE	Poster
93	431	Neutronics Analysis of the 40 degree CAD Model of ITER with the 3-D Deterministic Neutron Transport Code, ATTILA	Mr. AGGARWAL, Deepak	NFT	Poster
94	448	Study Of Disruptive Termination Of The Aditya Plasma Discharges	Mr. PUROHIT, Shishir	NFE	Poster
95	450	Design Of A Timing Circuit For HPM - Plasma Interaction Experiments	Mr. EDAPPALA, Praveenlal	NFE	Poster
96	453	Fundamental and second harmonic ECRH assisted Plasma start-up in tokamak SST-1	Mr. SHUKLA, Braj Kishore	NFE	Poster
97	460	Design of Mode Selective Coupler for 42GHZ, 200kW 3sec DST-Gyrotron	Mr. SHAIK, Ejazuddin	NFE	Poster
98	463	MULTI FIELD CHARACTERISATION OF GEODESIC ACOUSTIC MODES (GAMs) IN SINP TOKAMAK	Mr. LACHHVANI, Lavkesh	NFE	Poster
99	465	Throughput calibration of gas dosing valve for pumping speed study of indigenously developed fusion grade cryopump	Mr. PRATIKKUMAR, Nayak	NFE	Poster
100	469	DESIGN AND ANALYSIS OF A ROTATING TRITIUM TARGET HOLDER FOR 14-MeV NEUTRON GENERATOR	Mr. R, Anuraj; Mr. RAJYAGURU, Dhaval	NFE	Poster
101	471	Effect of TF Ripple On The Performance Of Tokamak Plasmas	Mr. ALLI, Amardas	NFE	Poster
102	474	Test Results of 3MW RF Dummy Load & 10kW Solid State RF Power Amplifier for ITER ICRH Frequency Range	Mr. JHA, Akhil; Mr. PATEL, Manoj	NFE	Poster
103	475	Development of UHV compatible Wilson Feed Through for Probe drive	Mr. PATEL, Kaushal	NFE	Poster
104	476	R& D Activity for ITER ICRF Power Source System	Mr. Trivedi, Rajesh	NFE	Poster
105	479	Improved Plasma Parameters Using Upgraded Ohmic Capacitor Bank Power Supply in ADITYA Tokamak	Mr. KALAL, M.b.	NFE	Poster
106	482	The Outgassing study of Cryogenic sealing & support materialfor Indigenous Cryopump	Mr. PARESH, Panchal	NFE	Poster
107	487	Pumping Performance Study for Cryopump with the Use of Test Particle Monte Carlo Simulation for Cryopump Development	Mr. RANA, Chirag	NFT	Poster
108	489	Studies Of Microstructure, Delta Ferrite And Ferrite Number In Multipass TIG Welded 25mm Thick SS304	Mr. SHAIKH, Shamsuddin	NFE	Poster
109	513	Generation and Transport of Saw-Teeth Induced Runaway Electrons in Aditya Tokamak	Ms. RAJ, Harshita	NFE	Poster

Plasma 2014 - Poster / Oral Papers
NUCLEAR FUSION (NF)

1	195	Neutronics Analysis and Shielding Optimization for X-Ray Crystal Spectrometer of ITER Using Both MCNP and ATTILA	Dr. P.V, Subhash	NFT	Oral
109	476	R&D Activity for ITER ICRF Power Source System	Mr. TRIVEDI, Rajesh	NFE	Oral

POSTER 109

ORAL 2