## PLASMA-2017

## POSTER SESSION - 2

## 08-Nov-2017 (14:45-17:45) Nuclear Fusion (NF)

No	ID	Title of Abstract	Primary Author	AREA	Туре
140	10	A LOW-COST GROUND LOOP DETECTION SYSTEM FOR ADITYA-	r imary Author	ANEA	Type
1	37	U ТОКАМАК	Mr. KUMAR, Rohit	NFE	Poster
2	49	Design and development of Electronics for Microwave Diagnostic in Aditya -Upgrade	Mrs. GAUTAM, Pramila	NFE	Poster
3	88	Recent Studies on Inertial Electrostatic Confinement Fusion Neutron Source	Ms. BORGOHAIN, Devashree	NFE	Poster
4	112	Application of function parametrization for Radial plasma position calibration in ADITYA-U	Mr. KUMAR, Sameer	NFE	Poster
5	114	PERFORMANCE ENHANCEMENT OF RIGID LN2 CRYOGENIC TRANSFER LINES of 80 K DISTRIBUTION SYSTEM	Mr. SHARMA, Rajiv	NFE	Poster
6	126	Case Study on effect of stray capacitances at High Voltage Power Supply	Mr. GUPTA, Laxmi Narayan	NFE	Poster
7	133	Ethernet Based Parameter setting and control for Soft Xray electronics	Ms. SHUKLA, Praveena Kumari	NFE	Poster
8	137	SEQUENTIAL PULSE GENERATION SYSTEM FOR BETA EXPERIMENT	Ms. GADDAM, Priyadarsini	NFE	Poster
9	140	Modification in Potential Well of an Inertial Electrostatic Confinement Device	Mr. BUZARBARUAH, Neelanjan	NFE	Poster
10	149	CONTROL SYSTEM FOR PELLET INJECTION SYSTEM	Mr. RAULJI, Vismaysinh	NFE	Poster
11	152	CONTROL SYSTEM OF OUT GASSING MEASUREMENT SYSTEM	Mr. ARAMBHADIYA, Bharatkuamar	NFE	Poster
12	155	Temperature and Density dependence thermal properties measurements of Li2TiO3 pellets by Laser Flash Technique	Ms. SAHOO, Rajashree	NFE	Poster
13	156	FPGA Based High Voltage Trigger Circuit For SMARTEX-C	Ms. SHAH, Minsha	NFE	Poster
14		Study of effective thermal conductivity of Lithium meta- titanate and Aluminum oxide pebble beds by transient hot wire method	Mr. KANJIYA, Sumit	NFE	Poster
15	192	Design of Standalone Closed-loop Piezoelectric Valve Control System Using Microcontroller ForGas-feed System in Aditya- Upgrade Tokamak	Mr. EDAPPALA, Praveenlal	NFE	Poster
16	201	Implementation of Synchronous Reference Frame Theory based Shunt Active Power Filter using DSP Controller.	Mr. GUPTA, Chandra Kishor	NFE	Poster
17	211	Study of the effect of Extruder and Spheronizer speed and concentration of PVA in Li2TiO3 pebbles fabrication by extrusion-spheronization technique	Mr. MAKWANA, Mayankkumar	NFE	Poster
18	215	Study On Neutron Emission From An Inertial Electrostatic Confinement Device	Mr. BUZARBARUAH, Neelanjan	NFE	Poster
19	220	Prototype Compact data acquisition system and its implementation using Labview	Ms. PATEL, Harshida	NFE	Poster

No	ID	Title of Abstract	Primary Author	AREA	Туре
20	229	WATER COOLING SYSTEM FOR SST NEUTRAL BEAM INJECTION SYSTEM: FROM CONCEPT TO ENGINEERING DESIGN	Dr. JANA, Mukti Ranjan; Mr. BARUAH, Ujjwal	NFE	Poster
21	247	FABRICATION OF U-BEND MHD TEST MOCKUP	Mr. VASAVA, Vijay	NFE	Poster
22	257	Characterization of an Ion Deflection Magnet by the Wire Orbit Method	Dr. SHARMA, Sanjeev Kumar	NFE	Poster
23	262	Investigation of the behavior of effective charge of Aditya tokamak plasmas	Dr. CHOWDHURI, Malay Bikas	NFE	Poster
24	264	Calorimetry for SST-1 Vacuum Vessel	Mr. ARUMUGAM, Arun Prakash	NFE	Poster
25	270	Automatic Capacitance and Tan Delta Testing Facility for Insulation Characterization	Mr. CHIRAGKUMAR, Dodiya	NFE	Poster
26	271	Design and testing of Data Analysis tool for ECRH Systems in LabView	Mr. PATEL, Jatinkumar	NFE	Poster
27	272	Engineering Design & Development of Lead Lithium Loop For Thermo-Fluid MHD Studies	Mr. KUMAR, Mritunjay	NFE	Poster
28	273	GUI and Control Interface Design in Labview for VME based DAC system in ECRH	Mr. PATEL, Jatinkumar	NFE	Poster
29	274	Software Development Environment for Control and Data Acquisition Systems	Mr. GULATI, Hitesh Kumar	NFE	Poster
30	275	Power Supply Quench Protection System of Toroidal Field Superconducting Coil for SST-1	Mr. VORA, Murtuza	NFE	Poster
31	278	Estimation of particle confinement time for Aditya Tokamak Plasma	Dr. DEY, Ritu	NFE	Poster
32	283	ERROR ANALYSIS IN THE SPECTROSCOPIC MEASUREMENT BY DOPPLER SHIFT SPECTROSCOPY SYSTEM FOR NEGATIVE ION BASED NEUTRAL BEAM INJECTION SYSTEM	Mr. DEKA, Arnab Jyoti	NFE	Poster
33	291	Role of Helium leak detection inSST-1 Cryogenics system	Mr. NIMAVAT, Hiren	NFE	Poster
34	292	Discharge Characteristics Comparisons of ADITYA Tokamak Plasma Versus ADITYA – U Tokamak Plasma	Mr. TANNA, Rakesh	NFE	Poster
35	299	Failure Analysis of 3.0MW Soda Water Based Dummy Load	Mr. JHA, Akhil	NFE	Poster
36	301	Recent Observations and Maintenance issues of Oil Removal System in 1.3 kW @ 4.5 K Helium Plant for SST-1	Mr. PATEL, Ketankumar	NFE	Poster
37	302	TESTING OF INDIGENOUS DEVELOPED ION PUMP POWER SUPPLY	Mrs. DALAKOTI, Saifali	NFE	Poster
38	303	Evacuation and safety valve testing of Liquid Nitrogen Storage Tanks at IPR Cryo facility	Mr. SHAH, Pankilkumar	NFE	Poster
39	306	Development of soft starter for 3-phase, 150kV isolation transformer of Twin Source (TS)	Mr. PRAJAPATI, Bhaveshkumar	NFE	Poster
40	307	DESIGN OF RESONANT CONVERTER BASED DC POWER SUPPLY FOR RF AMPLIFIER	Mr. MOHAN, Kartik	NFE	Poster
41	309	Lab scale design, fabrication of cryo line to study and analysis two phase flow characteristics using Liquid Nitrogen	Mr. SINGH, Gaurav Kumar	NFE	Poster

No	ID	Title of Abstract	Primary Author	AREA	Туре
42	312	APPLICATION OF HIGH TEMPERATURE CALCINATION IN PHASE PURIFICATION OF SrCe0.9Y0.1O3-⊗ SOLID STATE PROTON CONDUCTING CERAMIC FOR DEVELOPMENT OF ELECTROCHEMICAL BASED HYDROGEN ISOTOPE SENSOR	Mr. YADAV, Deepak	NFE	Poster
43	327	Design and Simulation study on 60 MHz Rod Type Radio Frequency Quadrupole Accelerator at IPR	Mrs. BAHL, Renu	NFE	Poster
44	336	Elastic Modulus and Hardness Measurement of Lithium Titanate pebbles using Nano Indentation Technique.	Mr. GUPTA, Suraj	NFE	Poster
45	337	DEVELOPMENT OF ARDUINO BASED FAULT DETECTION SYSTEM FOR ROBIN	Mr. PATEL, Kartik	NFE	Poster
46	338	Development, Implementation and Remote Operation Of Twin Source Vacuum System Through TS-DACS	Mr. RATNAKAR KUMAR YADAV, Ratnakar	NFE	Poster
47	339	Multimegawatt-multiampere neutral beam test facility at IPR	Dr. SINGH, Mahendrajit	NFE	Poster
48	340	Experimental Study on Critical Length of Electrically Exploding Wire	Ms. BATRA, Jigyasa	NFE	Poster
49	341	Effect of Stress Shield Configuration on High Voltage Operation of Prototype HV Bushing	SHAH, Sejal	NFE	Poster
50	345	SOLENOID VALVE BASED GAS FEED SYSTEM FOR VARIABLE PRESSURE IN ALTERNATE ARRANGEMENT OF MASS FLOW CONTROLLER	Mr. BHAGORA, Jignesh	NFE	Poster
51	347	SURFACE MODIFICATION STUDY OF ZIRCONIUM ON EXPOSURE TO FUSION GRADE PLASMA IN AN 11.5 kJ PLASMA FOCUS DEVICE	Mr. SRIVASTAVA, Rohit	NFE	Poster
52	349	EXPERIMENTAL MEASUREMENT OF BEAM EMITTANCE OF ACCELERATOR BASED 14-MEV NEURON GENERATOR	Mr. KUMAR, Ratnesh	NFE	Poster
53	354	Development of Lab Scale Fast Gas Injection System for SST-1 Tokamak	Mr. PATHAN, Firozkhan	NFE	Poster
54	359	Ductile To Brittle Transition Temperature Studies of IN-RAFMS	Mr. PRAJAPATI, Atul Kumar	NFE	Poster
55	360	Estimations of capacitance required for the matching network of ROBIN	Mr. VUPPUGALLA, Mahesh	NFE	Poster
56	364	Manufacturing of Large Size RF Based -ve Ion Source with 8 Drivers -Challenges and Learnings-	Mr. JOSHI, Jaydeep	NFE	Poster
57	366	Generation and Deconfinement of Runaway Electrons in the ADITYA tokamak	Mr. SRIDHAR, Sundaresan	NFE	Poster
58	368	Design of Test Jig for Centralized Interlock & Protection Module of ITER-India Gyrotron Test Facility	Ms. RATHOD, Vipal	NFE	Poster
59	372	Study of Morphological Changes and Defects in Ion Irradiated Tungsten Foils	Dr. ATTRI, Asha	NFE	Poster
60	374	RF Measurements on the Indigenously Developed 63.5mm Corrugated Waveguide Prototype for ITER-India Gyrotron Test Facility (IIGTF)	Ms. SHARMA, Anjali	NFE	Poster
61	376	Development of Prototype Collector Coil Sweeping Power Supply for ITER-India Gyrotron Test Facility (IIGTF)	Mr. E, Sharan Dilip	NFE	Poster

No	ID	Title of Abstract	Primary Author	AREA	Туре
62	379	Data Acquisition system for Cooling Water System of ITER-	Mr. MANDGE, Deepak	NFE	Poster
02	373	India Gyrotron Test Facility	WANDGE, Deepak		1 03101
		Development of Data Acquisition System and signal			
63	382	conditioning for T type thermocouples for Cryocooler	Mr. TYAGI, Himanshu	NFE	Poster
		experiment of Indian Test Facility			
64	383	Development of Water Cooling Distribution System for ITER-	Mr. YADAV, Amit	NFE	Poster
04	363	India Gyrotron Test Facility	IVII. IADAV, AIIIIC	INIL	1 03161
65	384	In-Situ Monitoring of Dynamic Work Function in Conditions	Mr. SINGH, Pranjal	NFE	Poster
03	304	Relevant to Negative Ion Sources	IVII. SIIVOIT, Franțai	INIL	roster
66	385	Phase Formation of Er2O3 Coating in Reactive Sputter	Dr. RAYJADA, Pratipalsinh A	NFE	Poster
00	363	Deposition and its Effects	TATIADA, Fratipaisiiii A	INIL	Foster
		Design And Development Of Prototype RF Power			
67	390	Measurement System Using 8x1 RF Multiplexer Switch And	Mr. VIRANI, Chetan	NFE	Poster
		Analog De-Multiplexer			
CO	392	An Analysis of Control Scheme and Test Results of Fast	Mar CUDTA Chirana	NEE	Destar
68	392	Feedback Power Supply	Mr. GUPTA, Shivam	NFE	Poster
60	202	DESIGN OF DC POWER SUPPLY FOR SOLID STATE POWER		NIEE	D
69	393	AMPLIFIER	Mr. AGARWAL, Rohit	NFE	Poster
	20-	Process Design of Cryogenic Distillation Column for Hydrogen			1
70	395	Isotope Separation System	Mr. RAI, Sudhir	NFE	Poster
		CONCEPTUAL DESIGN OF TRITIUM ACCOUNTANCY SYSTEM			1
71	397	FOR LLCB TBM	Mr. PATEL, Rudreksh	NFE	Poster
		CONCEPTUAL DESIGN OF ADITYA-UPGRADE BAKING CONTROL			1_
72	399	SYSTEM	Mr. ARAMBHADIYA, Bharatkuamar	NFE	Poster
		3D Eddy Current Analysis in SST-1 Start-Up using Finite			1
73	400	Element Method	Mr. ALLI, Amardas	NFE	Poster
		Up gradation of VME Based Data Acquisition for SST-1			1
74	402	Superconducting Magnets	Mr. VARMORA, Pankaj	NFE	Poster
		Upgradation and Testing of Signal Conditioning Electronics for			1
75	404	SST-1 Magnets	Mr. PARGHI, Bhadresh	NFE	Poster
				<u></u>	
76	405	Prototype Development of Lip Seal by Laser Beam Welding	Mr. YADAV, Ashish	NFE	Poster
		Quench Detection Electronics Testing Protocol for SST-1			<u> </u>
77	410	Magnets	Mrs. BANAUDHA, Moni	NFE	Poster
		DEVELOPMENT OF FLEXIBLE 12 INCH BELLOW TYPE			†
78	411	TRANSMISSION LINE	Mr. ANAND, Rohit	NFE	Poster
					+
79	415	Development of Field Simulator to Test & Qualify the Gyrotron	Mr. SHAH, Ronak	NFE	Poster
, ,	713	Local Control Unit for ITER-India Gyrotron Test Facility	ivii. Stirkii, Konak		Oster
		SOFTWARE DEVELOPMENT FOR NB ION SOURCE POWER			+
80	423	SUPPLES OPERATION USING PXI SYSTEM	Mr. THAKKAR, Dipal	NFE	Poster
		Helium Leak Testing of Base Section Factory Weld Joints for			+
81	431	ITER Cryostat	Mr. PATEL, Mitulkumar	NFE	Poster
		Development of Outgassing Testing facility for ITER Cryostat			+
82	436	materials	Mr. JINDAL, Mukesh	NFE	Poster
		Accelerated Joining Process For PFC Coupon Materials In			+
83	437	Gleeble 3800 system	Dr. SINGH, Kp	NFE	Poster
		Thermal Analyses Of Conduction Cooled And Solid Nitrogen			+
84	441		Mrs. KUNDU, Ananya	NFE	Poster
		Cooled Nb3Sn Magnet			

No	ID	Title of Abstract	Primary Author	AREA	Туре
0.5	452	Test Setup for Pressure Drop and Flow Measurement for Cable		NEE	
85	452	in Conduit Conductor	Mr. PANCHAL, Arun G.	NFE	Poster
86	455	Updates of magnet system division activities at IPR	Mr. PRASAD, Upendra	NFE	Poster
87	464	Experimental and simulation study on filling mechanism of	Mr. SAHOO, Ganeswar	NFE	Poster
87	404	Li2TiO3 pebble for LLCB TBM	IVII. SANOO, Ganeswai	INFE	Postei
88	465	Manufacturing Aspects Of Long Length Superconducting Cable	Mr. GHATE, Mahesh	NFE	Poster
	403	In Conduit Conductors	ivii. Griver, ivianesii	-	1 03101
89	468	Development Of Insulation Systems For Various Magnets At	Mr. KUMAR, Nitish	NFE	Poster
<u> </u>		Magnet System Division	,		
90	470	Investigation Of Thermal Performances Of Various Cryostats	Mr. GHATE, Mahesh	NFE	Poster
		For Low Temperature Experiments			-
	476	Design of Test Kits for the RF Characterization of the PAM	NA LAND WALLE		D
91	476	Antenna of LHCD System for ADITYA-Upgrade Tokamak	Mr. JAIN, Yogesh	NFE	Poster
		Adaparation above atomistic of different transport above all at			
92	482	Adsorption characteristic of different types of charcoals at cryogenic temperature	Dr. MISHRA, Jyotishankar	NFE	Poster
		Development of Cobalt Ferrite for High Frequency Microwave	Mr. TYAGI, Ashwani; Dr.		
93	491	Circulators	PARASHAR, Kajal	NFE	Poster
		MODELLING AND PIPING FLEXIBILITY ANALYSIS OF	T ANASTIAN, Rajai		
94	42	EXPERIMENTAL HELIUM COOLING LOOP (EHCL)	Mr. VERMA, Aditya Kumar	NFT	Poster
95	46	Visco-resistive MHD Study Of Internal Kink(m=1) Modes	Mr. MENDONCA, Jervis	NFT	Poster
96	138	DEVELOPEMENT AND VALIDATION OF MULTIPOINT	Ms. KANTH, Priti	NFT	Poster
		ACTIVATION CODE ACTYS-1-GO AND COUPLING WITH ATTILA			
97	150	DESIGN AND ANALYSIS OF MANIFOLDS FOR INDIAN HCCB	Mr. CHADNAA Doorok	NET	Doctor
97		BLANKET MODULE	Mr. SHARMA, Deepak	NFT	Poster
98	158	Study of temperature distribution of Li2TiO3 pebble bed using	Mr. PATEL, Harsh	NFT	Poster
	138	finite element simulation	IVII. FAILL, Haisii		rostei
99	185	Design Of A 3.7 GHz Oscillator For The Solid State Drive Of The	Mr. SAINKAR, Sandeep	NFT	Poster
		LHCD System	in si in in sun sun seep		. 00101
		PRELIMINARY MECHANICAL DESIGN OF THE VACUUM			
100	190	BOUNDARY AND IN-VACUUM COMPONENTS OF RFX-MOD2	Dr. PATEL, Nisarg	NFT	Poster
		MACHINE			
101	197	HEAT TRANSFER ANALYSIS OF ZnO-WATER NANOFLUID FOR	Mr. MUND, Abhishek; Mr.	NFT	Poster
		NUCLEAR APPLICATION	PATTANAYAK, Bikash		
102	246	3D MAGNETO-HYDRODYNAMIC ANALYSIS FOR Pb-Li FLOW	Mrs. ANITA, Patel	NFT	Poster
		INSIDE LLCB TBM EFFECT OF EXTERNAL POLOIDAL FLOWS ON			1
103	280	ELECTROMAGNECTIC MICROINSTABILITIES IN LARGE ASPECT	Mr. VERMA, Deepak	NFT	Poster
103	200	RATIO TOKAMAKS	IVII. VEINIVIA, Deepak		ויייייייייייייייייייייייייייייייייייייי
		Preliminary Thermal analysis of grids for TWIN source			
104	297	extraction system	Mr. PANDEY, Ravi	NFT	Poster
		Conductance calculation and Vacuum system design for TWIN			_
105	298	source experiments	Mr. PANDEY, Ravi	NFT	Poster
		Discrete Element Method (DEM) simulation of pebble filling			
106	353	under gravity and influence of wall effect on packing fraction	Mr. PANCHAL, Maulikkumar	NFT	Poster
	333	of pebble beds			
		· ·			

No	ID	Title of Abstract	Primary Author	AREA	Туре
107	355	Overview of high pressure, high temperature helium cooling system–An attractive coolant for Fusion Blankets	Mr. YADAV, Brijesh Kumar	NFT	Poster
108	358	Determination Of Residual Stresses In Large Sized Ceramic To Metal Brazed Insulator Of High Voltage Bushing (HVB) Of Diagnostic Neutral Beam (DNB)	Mr. SHARMA, Dheeraj Kumar	NFT	Poster
109	362	Toroidal Field Ripple Estimation For The Large Aspect Ratio 3.4 SST-2 Like TF Coil Required For NBI Port allocation In The Tokamak	Mr. DUTTA, Someswar	NFT	Poster
110	412	Design Development of Bellows for the DNB Beam Source	Mr. SINGH, Dhananjay	NFT	Poster
111	414	Neutronic Optimization Study of Indian Solid Breeder Blanket Concept for DEMO	Mr. AGGARWAL, Deepak	NFT	Poster
112	427	Design Development of Heat Transfer Elements for characterization of neutral beam with power density of 65 MW/m2 in INTF	Mr. MUVVALA, Venkata Nagaraju	NFT	Poster
113	428	Mathematical Formulation To Determine Parent Isotopic And Elemental Contributing Factors For Minimizing Nuclear Radiological Responses And Optimize Material Composition	Mr. TADEPALLI, Sai Chaitanya	NFT	Poster
114	430	STRUCTURAL INTEGRITY ASSESSMENT OF TORUS CRYO PUMP HOUSING (TCPH)	Mr. JOGI, Gaurav	NFT	Poster
115	433	Torus Cryopump Housing (TCPH): Manufacturing challenges	Mr. JOSHI, Vaibhav	NFT	Poster
116	434	Development and Simulation of Visual Servo Controller for Remote Handling Systems	Mr. DUTTA, Pramit	NFT	Poster
117	445	Concept design for real time interactive control system with haptic feedback for Tele-manipulation RH System	Mr. RASTOGI, Naveen	NFT	Poster
118	446	Design and Analysis of a Rotary Joint for Remote Handling Equipment	Mr. GOTEWAL, Krishan Kumar	NFT	Poster
119	451	Preliminary analysis of accident in SST-1 current feeder system	Ms. ROY, Swati	NFT	Poster
120	473	DEVELOPMENT OF PICKLING AND PASSIVATION PROCESS FOR XM-19(UNS S20910) FASTENERS FOR IWS BLOCK ASSEMBLY	Mr. SUNIL, Dani	NFT	Poster
121	475	IDENTIFYING INTERSTITIALS AND CHARACTERIZING INTERSTITIAL DIFFUSION IN BCC AND FCC METALS	Mr. BUKKURU, Srinivasarao	NFT	Poster
122	479	Design and Performance Studies of Passive Active Multijunction (PAM) Antenna for ADITYA -Upgrade Tokamak	Mr. JAIN, Yogesh	NFT	Poster
123	483	Design of a High CW Power Circulator for LHCD System of SST- 1 Tokamak	SHARMA, Pramod	NFT	Poster