

TECHNICAL REPORTS (TR) 2007-2018

(IPR/TR-130/2007 to IPR/TR-470/2018)

CALCULATION OF AC LOSSES IN COMMERCIAL GRADE BI(2223) TAPE BY AC SUSCEPTIBILITY TECHNIQUE

PROMODA KUMAR NAYAK, U. PRASAD, A.N. SHARMA, S. KEDIA, D. PATEL, Y. KRISTI, V. AMIN AND S. PRADHAN

IPR/TR-130/2007 (MAY, 2007)

DESIGN, FABRICATION AND TESTING OF UHV COMPATIBLE HIGH POWER RF DEVICES FOR LOWER HYBRID CURRENT DRIVE SYSTEM ON SST-1 TOKAMAK
P.K. SHARMA, S.L. RAO, K.K. RAMELLA, D. BORA AND LHCD GROUP

IPR/TR-131/2007 (JUNE, 2007)

1.5K SHUNT MODE LOW CAPACITANCE ACTIVE RIPPLE REGULATOR FOR SCREEN GRID POWER SUPPLY OF 200KW, 91.2MHZ TETRODE AMPLIFIER
AGRAJIT GAHLAUT, N. RAJAN BABU, Y.S.S. SRINIVAS, D.S. BHATTACHARYA, AZAD SING MAKWANA, AVINASH SULE, NARENDRA SHAH, S.V. KULKARNI AND R.F. GROUP

IPR/TR-132/2007 (AUGUST, 2007)

A LOW COST, RELIABLE TECHNIQUE FOR FREQUENCY MEASUREMENT
K.SATHYANARAYANA, B.K. SHUKLA, P. CHATTAPADHYAY, D. PUROHIT, H. PATEL, R. BABU, M. KUSHWAH, K.G. PARMAR, PRAGNESH D., P. BISWAS AND Y.C. SAXENA

IPR/TR-133/2007 (AUGUST, 2007)

LOW RESISTANCE MEASUREMENTS IN CRYOGENIC TEMPERATURE
YOHAN KHRISTI, P.K. NAYAK, K. DOSHI, V. AMIN, S. KEDIA, A.N. SHARMA, U. PRASAD, D. PATEL, DINESH PATEL AND S. PRADHAN
IPR/TR-134/2007 (SEPTEMBER, 2007)

Signal Conditioning Electronics for Strain Gauge Transducer and Displacement Transducer

YOHAN KHRISTI, SUNIL KEDIA, VIKAS AMIN, FIROZ KHAN, DIPAK PATEL, U. PRASAD, KALPESH DOSHI, A.N. SHARMA and S. PRADHAN.

IPR/TR-135/2007 (SEPTEMBER, 2007)

Study of AC Susceptibility in Commercial Grade Mgb2 Tape

PRAMODA K. NAYAK, U. PRASAD, A.N. SHARMA, S. KEDIA, D. PATEL, Y. KHRISTI, V. AMIN, V. BHAVSAR and S. PRADHAN

IPR/TR-136/2007 (OCTOBER, 2007)

Real Time Acquisition System for High Power Klystron Tube Employed for Lower Hybrid Current Drive for SST-1 Tokamak

P.K. SHARMA, RITESH SUGANDHI, CHETAN VIRANI, NIRAV PATEL, Y.C. SAXENA and LHCD Group

IPR/TR-137/2007 (OCTOBER, 2007)

Design and Development of "Microcontroller Based Variable Voltage, Variable Frequency Regulated High Voltage Power Supply" for Plasma Perturbation Experiments

NILOHIT PRATAP SINGH, AGRAJIT GAHLAUT, N. RAJAN BABU, S.V. KULKARNI, RF Group and ABHIJIT SEN

IPR/TR-138/2007 (OCTOBER, 2007)

Testing and Optimization of the Matching Response Time for the Real Time Feedback Controlled ICRH-Automatic Matching Network (AMN) System of SST-1

MANOJ SINGH, KUMAR RAJNISH, RAMESH JOSHI, H.M. JADAV, SIJU GEORGE, RAJ SINGH, RITESH SUGANDHI, D. PUROHIT, S.V. KULKARNI and ICRH Group

IPR/TR-139/2007 (NOVEMBER, 2007)

Design and Development of Detector Signal Conditioning Electronics for SST-1 Thomson Scattering System

ARUNA THAKAR, AJAI KUMAR, JINTO THOMAS and CHHAYA CHAVDA

IPR/TR-140/2007 (DECEMBER, 2007)

Design and Fabrication of a High Temperature Furnace with Maximum Temperature of 9000C

PRAMODA K. NAYAK, U. PRASAD, D. PATEL and S. PRADHAN

IPR/TR-141/2007 (DECEMBER, 2007)

2008

Data Acquisition System for Plasma Facing Components of SST-1 Tokamak

ARUN PRAKASH. A, S. KHIRWARDKAR and FIRST WALL GROUP

IPR/TR-142/2008 (FEBRUARY, 2008)

Microcontroller based Amplitude and Phase Control Prototype Loop of High Power RF Source for ICRH System for Fusion Grade Tokomaks

AGRAJIT GAHLAUT, KUMAR RAJNISH, BHADAG CHIRAG, GAJIPARA NISHANT, S.V. KULKARNI, D. BORA and RF GROUP

IPR/TR-143/2008 (AUGUST, 2008)

An Experimental Setup for the Systematic Study of the Expansion Dynamics of Laser-Blow-Off Plasma Plume in Variable Transverse Magnetic Field

AJAI KUMAR, VISHNU CHAUDHARI, KIRAN PATEL, SONY GEORGE, S. SUNIL, R.K. SINGH, and RANJEET SINGH

IPR/TR-144/2008 (SEPTEMBER, 2008)

Two-Point Correlation Reflectometer on SST-1 Tokamak
NIRAV Y. JOSHI and P.K. ATREY
IPR/TR-145/2008 (SEPTEMBER, 2008)

Development of High Power Coaxial Vacuum Window for ICRF
DHARMENDRA RATHI, KISHORE MISHRA, SIJU GOERGE, ATUL VARIA, RAJ SINGH, S V KULKARNI, and ICRH-RF GROUP
IPR/TR-146/2008 (OCTOBER, 2008)

Testing of Cryogenic Bellows for Supply and Return Cryogenic Transfer Lines for SST-1
RAJIV SHARMA, B. SARKAR, HITEN VAGHELA, SATISH R.B, GIRISH GUPTA and Y C SAXENA
IPR/TR-147/2008 (OCTOBER, 2008)

Design, development and testing of de-mountable vacuum compatible seals at cryogenic temperature (77K and 4.2K)
RAJIV SHARMA, B. SARKAR, Y.C. SAXENA and CRYOGENIC GROUP
IPR/TR-148/2008 (OCTOBER, 2008)

Testing & Optimization of the Matching Response Time for the Real Time Feedback Controlled ICRH Automatic Matching Network (AMN) System of SST-1 with Hybrid Coupler & Total Transmission Line
RAMESH JOSHI, MANOJ PARIHAR, KUMAR RAJNISH, H M JADAV, SIJU GEORGE, D RATHI, RAJ SINGH, D PUROHIT, S V KULKARNI & ICRH GROUP
IPR/TR-149/2008 (DECEMBER, 2008)

Design, Fabrication and Testing of Pressurized Co-axial Directional Coupler for High RF Power Measurements for SST-1 ICRH System
DHARMENDRA RATHI, RAJ SINGH, S.V. KULKARNI and ICRH-RF GROUP
IPR/TR-150/2008 (DECEMBER, 2008)

2009

Installation and Testing of 1000A Power Supply for Superconducting Loads
A. N. SHARMA, U. PRASAD, P. VARMORA, K. DOSHI, S. PRADHAN and MAGNET DIVISION
IPR/TR-151/2009 (MARCH, 2009)

Installation and Testing of a Jc Measurement Facility for Superconducting Strands with a 12T Superconducting Background Field Solenoid at IPR
UPENDRA PRASAD, A.N.SHARMA, D.PATEL, J.PARMAR, S.KEDIA, PANKAJ VARMORA , J.C PATEL, A.M. BAPAT and S.PRADHAN
IPR/TR-152/2009 (APRIL, 2009)

Design, Development and Testing of Electromagnet Yoke Assembly for Fast Ferrite Tuner for Antenna Plasma Matching in ICRH Experiments on SST-1 Tokamak
R.A. YOGI, Y.S.S. SRINIVAS, D. RATHI, S. DANI, S.V. KULKARNI, D.BORA and ICRH-RF Group
IPR/TR-153/2009 (APRIL, 2009)

Generation of Multiple Analog Pulses with Different Duty Cycles within VME Control System for ICRH Aditya System
RAMESH JOSHI, MANOJ SINGH, H. M. JADAV, KISHOR MISRA, S. V. KULKARNI & ICRH-RF GROUP
IPR/TR-154/2009 (JULY, 2009)

Development of PLC based System for Monitor and Control of Power Supplies of 2-200 kW RF Amplifier Stages
H. M. JADAV, MANOJ PARIHAR, RAMESH JOSHI, KIRIT PARMAR, S.V. KULKARNI & ICRH-RF GROUP
IPR/TR-155/2009 (JULY, 2009)

Nondestructive Test of Brazed Cooling Tubes of Prototype Bolometer Camera Housing using Active Infrared Thermography
KUMUDNI TAHILIANI, SANTOSH PANDYA, SHWETANG PANDYA, R. JHA and J. GOVINDARAJAN
IPR/TR-156/2009 (SEPTEMBER, 2009)

SST-1 Information Management System (SIMS)
MANISHA BHANDARKAR, HARISH MASAND, AVEG KUMAR, HITESH CHUDASAMA, KIRTI MAHAJAN, D. CHENNA REDDY, S.PRADHAN and SST-1 OPERATION & CONTROL GROUP
IPR/TR-157/2009 (OCTOBER, 2009)

Prototype of ICRH DAC Client Software using Dot Net Technology running on Linux Environment
RAMESH JOSHI, H M JADAV, MANOJ PARIHAR, S V KULKARNI & ICRH GROUP
IPR/TR-158/2009 (NOVEMBER, 2009)

Installation, Commissioning and Operation of Versatile Machine for TF Coil Winding Pack Case Modification in SST-1 Hall
UPENDRA PRASAD, A.N. SHARMA, VISHAL SUTHAR, ARUN PANCHAL and S. PRADHAN
IPR/TR-159/2009 (NOVEMBER, 2009)

Performance Study of Strain Gauge Displacement Transducer at Various Cryogenic Temperatures

DIPAK PATEL, Y. KHRISTI, F. KHAN, S. KEDIA, A.N. SHARMA, U. PRASAD and S. PRADHAN
IPR/TR-160/2009 (DECEMBER, 2009)

Study and Conceptual Design of Time Synchronization System for SST-1
HARISH MASAND, MANISHA BHANDARKAR, AVEG KUMAR, HITESH CHUDASAMA, KIRTI MAHAJAN, S. PRADHAN
and SST-1 OPERATION & CONTROL GROUP
IPR/TR-161/2009 (DECEMBER, 2009)

2010

I-V Characteristics, Minimum Quench Energy and Normal Zone Propagation Studies of Forced Flow Gas Cooled YBCO Tape
ANANYA KUNDU, PIYUSH RAJ, SUNIL KEDIA, YOHAN KHRISTI, DIPAK PATEL and S.PRADHAN
IPR/TR-162/2010 (MARCH, 2010)

Signal Conditioning Electronics for Measurement of Stresses in SST-1 TF Coil
YOHAN KRISTI, KALPESH DOSHI, SUNIL KEDIA, A.N. SHARMA, UPENDRA PRASAD and SUBRATA PRADHAN
IPR/TR-163/2010 (MARCH, 2010)

Vacuum Pressure Impregnation Facility at IPR
SUBRATA PRADHAN and PRIYANKA BRAHMBHATT
IPR/TR-164/2010 (APRIL, 2010)

Development of 2.4ns Rise Time, 300kV, ~500MW Compact Co-Axial Marx Generator
T. PRABAHRAN, A. SHYAM, R. SHUKLA, P. BANERJEE, S. SHARMA. P. DEB, R. VERMA, R. KUMAR, R. DAS, B. DAS and B. ADHIKARY
IPR/TR-165/2010 (APRIL, 2010)

Crystal Quartz Optical Windows for Far Infrared Interferometer of SST-1
ASHA ADHIYA and RAJWINDER KAUR
IPR/TR-166/2010 (APRIL, 2010)

Diamagnetic Flux Measurement in Aditya tokamak
SAMEER KUMAR, RATNESHWAR JHA, PRAVEEN LAL, CHANDRESH HANSALIYA, M.V. GOPALKRISHNA AND THE ADITYA TEAM, SANJAY KULKARNI, KISHORE MISHRA, AND THE ICRH GROUP
IPR/TR-167/2010 (JUNE, 2010)

Vacuum Guideline for SST-1 Tokamak
ZIAUDDIN KHAN and SST-1 VACUUM DIVISION
IPR/TR-168/2010 (JUNE, 2010)

Energy Storage Capacitor Banks for Electromagnetic and Electrohydraulic Forming
RISHI VERMA, A. SHYAM, R. KUMAR, B. ADHIKARY, R. SHUKLA, P. BANERJEE,
S. K. SHARMA, P. DEB, T. PRABAHARAN AND R. DAS
IPR/TR-169/2010 (SEPTEMBER, 2010)

A Design Approach towards a High Power Gyrotron Output-TE03 Mode Microwave Power Characterization and its Mode Conversion to HE11 Mode
K. SATHYANARAYANA, NIDHI SHAH and S.V. KULKARNI
IPR/TR-170/2010 (OCTOBER, 2010)

2011

Design, Fabrication and Testing of Corrugated Waveguide using Round Trip Insertion Loss Measurement Technique
K. SATHYANARAYANA, NIDHI SHAH, TUSHAR PANCHAL, PRIYANKA SOLANKI and S.V. KULKARNI
IPR/TR-171/2011 (JANUARY, 2011)

Automation of Aditya Capacitor Bank Charging System
N.C. PATEL, CHHAYA CHAVDA, RAKESH TANNA, PRABAL CHATTOPADHYAY
IPR/TR-172/2011 (MARCH, 2011)

Development and Integration of Data Acquisition System for SST-1 Phase-1 Plasma Diagnostics
AMIT K. SRIVASTAVA, MONIKA SHARMA, IMRAN MANSURI, ATISH SHARMA, TUSHAR RAVAL and SUBRATA PRADHAN
IPR/TR-173/2011 (MARCH, 2011)

Simplified and Cost Effective Method of Temperature Sensors Testing at 4.2K using Liquid Helium (LHe) Transport Dewar
DIPAK PATEL, A.N. SHARMA, PANKAJ VARMORA, UPENDRA PRASAD and S. PRADHAN
IPR/TR-174/2011 (MAY, 2011)

Development of Fast, Compact ~ 300kV, 1.8kJ Marx Generator for Directly Driving Virtual Cathode Oscillator Type High Power Microwave Device
BISWAJIT ADHIKARY, RAJESH KUMAR, R. SHUKLA, S.K. SHARMA, P.BANERJEE, P.DEB, T. PRABAHARAN, R.DAS, B.K. DAS and A. SHYAM
IPR/TR-175/2011 (MAY, 2011)

Engineering Design of 750KW, 91.2 MHz Amplifier
RAJ SINGH
IPR/TR-176/2011 (JUNE, 2011)

Microstructural Studies of Electrospark Deposited Aluminide Coatings on Reduced Activation 9Cr Steels

NIRAV I. JAMNAPARA, STEFANO FRANGINI, DILIP AVTANI, VISHAL NAYAK, N.L. CHAUHAN, G.JHALA, S. MUKHERJEE, and A.S. KHANNA

IPR/TR-177/2011(JUNE, 2011)

In-House Facility for Maintenance and Repairing Experience of Vacuum Pumps, Problems and Solutions

RAJIV SHARMA, HIREN NIMAVAT, MANOJ SINGH, SUMAN KARKARI, V.L. TANNA and S. PRADHAN

IPR/TR-178/2011 (JUNE, 2011)

Engineering Design of Gas Discharge Hydrogen Cyanide Laser

ASHA ADHIYA, PABITRA KUMAR MISHRA and RAJWINDER KAUR

IPR/TR-179/2011 (JUNE, 2011)

Core-Ion Temperature Measurement of Aditya Tokomak using Passive Charge Exchange Neutral Particle Energy Analyzer

SANTOSH P. PANDYA, KUMAR AJAY, PRIYANKA MISHRA, RAJANI D. DHINGRA and J. GOVINDARAJAN

IPR/TR-180/2011 (AUGUST, 2011)

Two Series Ignitron Crowbar System for 82.6GHz Gyrotron for ECRH in SST-1

MAHESH KUSHWAH, B K SHUKLA, RAJAN BABU, ANURAG SHYAM, S LAXMIKANT RAO, JATIN PATEL, HARSHIDA PATEL, VIPAL RATHOD, RONAK SHAH, PRAGNESH DHORAJIYA, ANJALI SHARMA, SATISH D. PATEL and VISHAL BHAVSAR

IPR/TR-181/2011 (AUGUST, 2011)

High Power CW Test of 82.6GHz Gyrotron

B K SHUKLA, MAHESH KUSHWAH, RAJAN BABU, JATIN PATEL, K. SATHYANARAYANA, S LAXMIKANT RAO, PRAGNESH DHORAJIYA, HARSHIDA PATEL, SUNIL BELSARE, VIPAL RATHOD, SATISH D. PATEL, VISHAL BHAVSAR, PRIYANKA A SOLANKI, ANJALI SHARMA, RONAK SHAH, MIKHAIL SHMELEV, YURY BELOV and VLADIMIR BELOUSOV

IPR/TR-182/2011 (AUGUST, 2011)

High Power Test of CVD Diamond Window for ECRH System in SST-1

B K SHUKLA, RAJAN BABU, MAHESH KUSHWAH, K. SATHYANARAYANA, JATIN PATEL, S LAXMIKANT RAO, PRAGNESH DHORAJIYA, HARSHIDA PATEL, SUNIL BELSARE, VIPAL RATHOD, SATISH D. PATEL, VISHAL BHAVSAR, PRIYANKA A SOLANKI, ANJALI SHARMA, RONAK SHAH, MIKHAIL SHMELEV, YURY BELOV and VLADIMIR BELOUSOV

IPR/TR-183/2011 (AUGUST, 2011)

Testing of Bridge Type Joint for PF3 Repair in Current Lead Test Setup
A. N. SHARMA, U.PRASAD, S. PRADHAN, N.C. GUPTA, V.L. TANNA, P. VARMORA, D. PATEL
IPR/TR-184/2011 (AUGUST, 2011)

Analysis of N2 Gas Heating and Supply System for SST-1 Vacuum Vessel and Plasma Facing Components Baking
YUVAKIRAN PARAVASTU, ZIAUDDIN KHAN, FIROZKHAN PATHAN, SIJU GEORGE, GATTU RAMESH, SUBRATA PRADHAN and SST-1 VACUUM DIVISION
IPR/TR-185/2011 (AUGUST, 2011)

Programmable Pulse Generator for Aditya Gas Puffing System
NARENDRA PATEL, CHHAYA CHAVDA, S. B. BHATT, PRABAL CHATTOPADHYAY, and Y.C. SAXENA
IPR/TR-186/2011 (AUGUST, 2011)

SST-1 Vacuum Data Acquisition and Control System
KALPESH R. DHANANI, ZIAUDDIN KHAN and SST-1 VACUUM DIVISION
IPR/TR-187/2011 (SEPTEMBER, 2011)

Design and Development of CAMAC Based Eight Channel Delayed Pulse Generator
N C PATEL, CHHAYA CHAVDA, PRABAL CHATTOPADHYAY, Y.C. SAXENA
IPR/TR-188/2011 (OCTOBER, 2011)

70kV, 22A DC Power Supply for Testing of High Power RF and Microwave Tubes
YSS SRINIVAS, N RAJAN BABU, KM PARMAR, BHAVESH KADIA, CHETAN VIRANI, PRAGNESH DHORAJIYA, JIGALRAJ VANSIA, SHEFALI DALAKOTI, DOSHI RAVIKUMAR, BRAHMBHATT TUSHAR, PATIL GAJENDRA, ANIL VISHWAKARMA and SV KULKARNI
IPR/TR-189/2011 (OCTOBER, 2011)

Strap Joint Resistance Analysis for Second Generation YBCO Coated Conductor
ANANYA KUNDU, PIYUSH RAJ, SUBRATA PRADHAN
IPR/TR-190/2011 (OCTOBER, 2011)

High Heat Flux Tests of Divertor Macro Brush Type Mock-Ups
Y. PATIL, D. KRISHNAN, A. PATEL, S.S.KHIRWADKAR and PROTOTYPE DIVERTORS DIVISION OF IPR
IPR/TR-191/2011 (NOVEMBER, 2011)

Ultrasonic Diagnostic for Superconducting Magnets Winding Pack Joint Quality Control of SST-1

UPENDRA PRASAD, A.N.SHARMA, D.PATEL, MAGNET DIVISION and
S.PRADHAN
IPR/TR-192/2011 (NOVEMBER, 2011)

Design, Fabrication, Testing and Integration of 1.5 kV, 1.5A Screen Grid Power Supply for
200 kW, 91.2 MHz CWRF Amplifier
BHAVESH R KADIA, YSS SRINIVAS, SALMAN ANSARI, H.M. JADAV, S.V.
KULKARNI and ICRH GROUP
IPR/TR-193/2011 (NOVEMBER, 2011)

The Electric Field Measurement using Indigenously Developed RF Modulated Dipole
Probe
P. K. SRIVASTAVA, L. M. AWASTHI, G. RAVI, SUNIL KUMAR and S. K. MATTOO
IPR/TR-194/2011 (NOVEMBER, 2011)

Data Acquisition and Control System Software for 91.2 MHz 1.5 MW (ICRH) System for
(SST1)
RAMESH JOSHI, H M JADAV, MANOJ PARIHAR, B R KADIA, K M PARMAR, A
VARIA, K MISHRA, Y S S SRINIVAS, R A YOGI, A GAYATRI, RAJ SINGH, SUNIL
KUMAR and S.V. KULKARNI
IPR/TR-195/2011 (NOVEMBER, 2011)

High Availability of Servers
HEMANT JOSHI and SUTAPA RANJAN
IPR/TR-196/2011 (DECEMBER, 2011)

Commissioning of 11kV, 2MVA Voltage Variation System for High Power RF and
Microwave Tubes
KIRIT PARMAR, Y.S.S. SRINIVAS, RAJAN BABU, S.V. KULKARNI and ICRH
GROUP
IPR/TR-197/2012 (JANUARY, 2012)

Design of a Fast Scanning Langmuir Probe Drive for SST-1 Tokamak Divertor
PRABHAT KUMAR, RATNESHWAR JHA, M.V. GOPALAKRISHNA, KUMUDNI
TAHILIANI
IPR/TR-198/2012 (JANUARY, 2012)

Stabilization of 25kW Plasma Torch (Graphite based) using IGBT Based Power Supply at
FCIPT
C. PATIL, V. JAIN, B. PATEL, A. VISANI, V. CHAUHAN
IPR/TR-199/2012 (JANUARY, 2012)

Overview of Design and Thermal-hydraulic Analysis of Indian Solid Breeder Blanket
Concept

PARITOSH CHAUDHURI, CHANDAN DANANI, VILAS CHAUDHURI, and E.
RAJENDRA KUMAR
IPR/TR-200/2012 (JANUARY, 2012)

Purchase Information Collection Software (PICS)
PRIYANKA PATEL and S.S. KHIRWADKAR
IPR/TR-201/2012 (FEBRUARY, 2012)

A Design Report of Solar Panel Plasma Interaction Experiment (SPIX-II)
SURYAKANT B. GUPTA, KEENA KALARIA, NARESH VAGHELA, SUBROTO
MUKHERJEE
IPR/TR-202/2012 (MARCH, 2012)

Development of Indigenous Glow Detector for Tokamak ADITYA
K.A. JADEJA, S.B. BHATT, B.N. DARJI and A.S. PRAJAPATI
IPR/TR-203/2012 (MARCH, 2012)

Technical Report on Development of Indoor High Voltage Switches for Moderate Currents
L.N. GUPTA, PARESH J. PATEL, N.P. SINGH, DIPAL THAKKAR, VISHNU PATEL,
C.B. SUMOD, L.K. BANSAL, KARISHMA QURESHI, VIJAY VADHER and U.K.
BARUAH

IPR/TR-204/2012 (MARCH, 2012)

Effect of Si on Hot Dip Aluminized 9Cr-1 Mo Steels and Subsequent Oxidation Studies
NIRAV I. JAMNAPARA, DILIP U. AVTANI, N. L. CHAUHAN, P.M. RAOLE, S.
MUKHERJEE, A.S. KHANNA
IPR/TR-205/2012 (MARCH, 2012)

Design of an Improved Filter Coupled Bolometer Camera for ADITYA tokamak
PRABHAT KUMAR, KUMUDNI TAHILIANI, M.V. GOPALAKRISHNA, SAMEER
KUMAR, VAIBHAV RANJAN, RATNESHWAR JHA and THE ADITYA TEAM
IPR/TR-206/2012 (APRIL, 2012)

Design Modification and Testing of the Analog Input-Output Isolation Cards and its
Interfacing with RF-ICRH System
MANOJ SINGH, H. M. YADAV, RAMESH JOSHI, BHAVESH, KIRIT PARMAR, Y.
S. S. SRINIVAS, S. V. KULKARNI and ICRH GROUP
IPR/TR-207/2012 (APRIL, 2012)

Development Programme Overview for Regulated High Voltage Power Supplies (RHVPS)
at IPR
PARESH J. PATEL, C. B. SUMOD, D. P. THAKKAR, L. N. GUPTA, V. B. PATEL, L.
K. BANSAL, K. QURESHI, V. VADHER, N. P. SINGH and U. K. BARUAH
IPR/TR-208/2012 (APRIL, 2012)

**Kinetics of Nb₃Sn, Cu₆Sn₅ and Cu₃Sn Layer Growth
YOGENDRA SINGH and SUBRATA PRADHAN
IPR/TR-209/2012 (APRIL, 2012)**

**A Technique on Vacuum Coupling of Photo Multiplier Tube with Monochromator for Improved Monitoring of VUV Emission from Aditya Tokamak
R. MANCHANDA, M. B. CHOWDHURI, J. GHOSH, K. M. PATEL, N. RAMAIYA, S. BANERJEE, NIRAL CHANCHAPARA, ANIRUDDH MALI, VIPAL RATHOD, C. J. HANSALIA, VINAY KUMAR and P. VASU
IPR/TR-210/2012 (APRIL, 2012)**

**Thermo-mechanical Analysis of Plasma Facing Components for SST-1
PARITOSH CHAUDHURI, P. SANTRA, D. CHENNA REDDY
IPR/TR-211/2012 (MAY, 2012)**

**Four Channel Sequence Detection and Display Electronics Card for the Analysis of Fault Sequence in the Rf-ICRH System
MANOJ SINGH, H.M. JADAV, RAMESH JOSHI, S.V. KULKARNI and RF-ICRH GROUP
IPR/TR-212/2012 (MAY, 2012)**

**Bolometer Diagnostics for SST-1 Divertor: A Hardware Modification Perspective
PRABHAT KUMAR, KUMUDNI TAHILIANI, P. YUVA KIRAN and RATNESHWAR JHA
IPR/TR-213/2012 (MAY, 2012)**

**Design and Development of FPGA based Multi Channel Interlock System
HARSHIDA PATEL, RAJAN BABU, B.K. SHUKLA, K. SATHYANARAYANA, D. PRAGNESH, JATIN PATEL and ECRH GROUP
IPR/TR-214/2012 (MAY, 2012)**

**Estimation of Thermal Anchoring Length for Various Instrumentation Wires used in SST -1 Coils Test Campaign
DIPAK PATEL, A. N. SHARMA, UPENDRA PRASAD, YOHAN KHRISTI, PANKAJ VARMORA, KALPESH DOSHI and S. PRADHAN
IPR/TR-215/2012 (MAY, 2012)**

**Experimental Simulation of Grid Breakdowns & High Voltage Conditioning of NBI Power Supply System
L.N.GUPTA, PARESH.J.PATEL, N.P. SINGH, VISHNU PATEL, DIPAL THAKKAR, SUMOD C.B, L.K.BANSAL, KARISHMA QURESHI, VIJAY VADHER and U.K BARUAH
IPR/TR-216/2012 (JUNE, 2012)**

Development of an Eco-Friendly Technology for the Surface Activation of Carbon Granule - by using Dielectric Barrier Discharge Process
SURYAKANT GUPTA, NARESH VAGHELA, KEENA KALARIA, RAMKRISHNA RANE, ADAM SANGHARIYAT, VIREN ACHARYA and SUBROTO MUKHERJEE
IPR/TR-217/2012 (JUNE, 2012)

Revisiting Plasma Hysteresis with an Electronically Compensated Langmuir Probe
P. K. SRIVASTAVA, S. K. SINGH, L. M. AWASTHI and S. K. MATTOO
IPR/TR-218/2012 (JULY, 2012)

Analytical Model for Active Cooling of ICRF Transmission Lines in SST-1
PRABHAT KUMAR and RAJ SINGH
IPR/TR-219/2012 (JULY, 2012)

Monitoring and Control Software for Cooling System of 82.6 GHz Gyrotron using NI LabView 8.5
JATINKUMAR PATEL, PRAGNESH DHORAJIYA, SUNIL BELSARE, HARSHITA PATEL, K SATHYANARAYANA, B K SHUKLA
IPR/TR-220/2012 (JULY, 2012)

Bipolar Pulsed Plasma Oxidation of Aluminized 9Cr-1Mo Steels
NIRAV I. JAMNAPARA, DILIP U. AVTANI, N. L. CHAUHAN, S. B. GUPTA, KEENA KALARIA, NARESH VAGHELA, S. MUKHERJEE, A. S. KHANNA
IPR/TR-221/2012 (JULY, 2012)

Analytical Results on Suitability of SST-1 Auxiliary Support Structure for Installation of Diagnostics
PRABHAT KUMAR SHARMA and THE SST-1 TEAM
IPR/TR-222/2012 (JULY, 2012)

Evaluation of True Hardness of Tungsten by Micro Vickers Hardness Test
CHARU LATA DUBE, S.S. KHIRWADKAR
IPR/TR-223/2012 (JULY, 2012)

Information Literacy: An Overview of Information Literacy Programmes at IPR
PRAGNYA J. PATHAK and S. SHRAVAN KUMAR
IPR/TR-224/2012 (JULY, 2012)

Design of Flow Distribution Network and it's Manifold Systems for Plasma Facing Components of SST-1 Tokamak
PARITOSH CHAUDHURI, P. SANTRA, N. RAVI PRAKASH, S. KHIRWADKAR, D. CHENNA REDDY, Y.C. SAXENA
IPR/TR-225/2012 (JULY, 2012)

Signal Monitoring, Data Acquisition, Interlocks and Control Electronics for 91.2 MHz, 1.5 MW (ICRH) System for SST-1
H. M. JADAV, RAMESH JOSHI, MANOJ SINGH, B. R. KADIA, K. M. PARMAR, S.V. KULKARNI and ICRH-RF GROUP
IPR/TR-226/2012 (AUGUST, 2012)

Development of Versatile Analog and Digital Isolation Cards for High Voltage DC Power Supplies and Protection Systems
BHAVESH R KADIA, YSS SRINIVAS, S.V. KULKARNI & ICRH GROUP
IPR/TR-227/2012 (AUGUST, 2012)

Design and Comparison of Two Different Orientations of People Bed in Indian HCCB Blanket Concept
PARITOSH CHAUDHURI
IPR/TR-228/2012 (AUGUST, 2012)

Thermal Properties of Tungsten and Tungsten Alloys for Divertor Applications
YASHASHRI PATIL, S.S.KHIRWADKAR, S. KANPARA
IPR/TR-229/2012 (SEPTEMBER, 2012)

Silicon Drift Detector Calibration for Soft X-Ray Measurements
SHISHIR PUROHIT, JAYESH V. RAVAL, Y. SHANKARA JOISA, CHINTAN SHAH
IPR/TR-230/2012 (SEPTEMBER, 2012)

Ignitron Switch based Crowbar Protection System for 1.5 MW CWRF Amplifier
BHAVESH R KADIA, YSS SRINIVAS, ATUL VARIA, S.V. KULKARNI and ICRH GROUP
IPR/TR-231/2012 (SEPTEMBER, 2012)

Data Acquisition, Control and Interlocks for 82.6GHZ(ECRH) System
HARSHIDA PATEL, J PATEL, B K SHUKLA and ECRH GROUP
IPR/TR-232/2012 (OCTOBER 2012)

Effect of Plasma Nitriding and Nitrocarburising Process on the Corrosion Resistance properties of Grade 2205 Duplex Stainless Steel
J. ALPHONSA, J. GHANSHYAM, M. SATYAPAL, PRATIPAL RAYJADA, NARENDRA CHAUHAN, SUBROTO MUKHERJEE and V.S. RAJA
IPR/TR-233/2012 (OCTOBER 2012)

Study of Suppressing Induced Voltages in PF System during Ohmic Operation
V. JAIN, A. VARDHRAJULU, C. N. GUPTA, R. SRINIVASAN, R. DANIEL, V. AGARWAL
IPR/TR-234/2012 (OCTOBER 2012)

Overload and Short Circuit Protection System for Multi-Secondary Transformers Utilised in a "Regulated High Voltage Power Supplies"
PARESH J. PATEL, C.B. SUMOD, D.P. THAKKAR, L.N. GUPTA, V.B. PATEL, L.K. BANSAL, K. QURESHI, V. VADHER, N.P. SINGH and U.K. BARUAH
IPR/TR-235/2012 (NOVEMBER 2012)

Differential Protection Scheme for Power Transformer with Micro Processor Based Numerical Relay: Introduction, Installation, Wiring, Configuration and Testing
AKHILESH KUMAR SINGH, A. VARDHARAJULU, C.K. GUPTA, CHIRAG B BHAVSAR
IPR/TR-236/2012 (DECEMBER 2012)

Studies on Divertor Cooling Finger of Helium Mock-Up through CFD Approach
S. RIMZA, K. SATPATHY, S.S. KHIRWADKAR, V. MENON, D. KRISHNAN
IPR/TR-237/2012 (DECEMBER 2012)

Glow Discharge Pulsed Plasma Aluminizing of 9Cr Steels
N. I. JAMNAPARA, V. S. NAYAK, D. U. AVTANI, N. L. CHAUHAN, D. PANDA, S. B. GUPTA, K. KALARIA, N. VAGHELA, S. MUKHERJEE and A. S. KHANNA
IPR/TR-238/2013 (JANUARY 2013)

Fabrication of Bridge Type Joints for PF#3T Winding Pact of SST-1
UPENDRA PRASAD, A.N. SHARMA, D.PATEL, K.DOSHI, Y. KHRISTI, P.VARMORA, S.J. JADEJA and S. PRADHAN
IPR/TR-239/2013 (JANUARY 2013)

Design, Fabrication and Inspection of Gun Drilling Machine Developed under “Magnet Technology Development Programme”
MAHESH GHATE, SUBRATA PRADHAN, ARUN SINGH, R.J. MALLIK, T.L. GOVINDANKUTTY, M.M. HUSSAIN, S.B. JAWALE
IPR/TR-240/2013 (JANUARY 2013)

Vacuum Gauge Calibration System based on Spinning Rotor Gauge
PRATIBHA SEMWAL and ZIAUDDIN KHAN
IPR/TR-241/2013 (JANUARY 2013)

Data Acquisition System for SST-1 Vacuum Vessel Baking
MANTHENA HIMABINDU and ZIAUDDIN KHAN
IPR/TR-242/2013 (FEBRUARY 2013)

A Review on Satellite Solar Array Arcing Phenomenon
RASHMI S. JOSHI and SURYAKANT B. GUPTA
IPR/TR-243/2013 (FEBRUARY 2013)

Design and Development of a Laboratory Scale Experimental System for Plasma Diagnostics (E×B Drift Velocity Measurement)
A. SATYAPRASAD, R. S. RANE, and S. MUKHERJEE
IPR/TR-244/2013 (FEBRUARY 2013)

Resin Cast Multisecondary Transformer’s Multiwinding Coil Cast Development
L.N.GUPTA, PARESH.J.PATEL, N.P.SINGH,VIBHU TRIPATHI, VISHNU PATEL, DIPAL THAKKAR, SUMOD C.B, L.K.BANSAL, KARISHMA QURESHI, VIJAY VADHER and U.K BARUAH
IPR/TR-245/2013 (APRIL 2013)

Benchmarking using Star CCM+ CFD Tool
K. SATPATHY and S.S. KHIRWADKAR
IPR/TR-246/2013 (MAY 2013)

Thermal-hydraulics of Water Cooled PFC for SST-1 Tokamak

PARITOSH CHAUDHURI, P. SANTRA, GATTU RAMESH, RAVI PRAKASH, S.
KHIRWADKAR, D. CHENNA REDDY and Y. C. SAXENA
IPR/TR-247/2013 (JULY 2013)

Ultrasonic Evaluation Report of Cu-W Monoblock Divertor Assembly
KEDAR BHOPE, MAYUR MEHTA, M.S KHAN, S.S. KHIRWADKAR
IPR/TR-248/2013 (JULY 2013)

Scientometric Study of Department of Atomic Energy Institutes: A Picture from Scopus
S. SHRAVAN KUMAR
IPR/TR-249/2013 (JULY 2013)

Tesla Based Pulse Generator for Electrical Breakdown study of Liquid Dielectrics
G. VEDA PRAKASH, R. KUMAR, J. PATEL, SAURABH. K, and A. SHYAM
IPR/TR-250/2013 (AUGUST 2013)

Design of Compact Electron Cyclotron Resonance (ECR) Ion source
SUDHIRSINH VALA, D BUTTON and M HOTCHKIS
IPR/TR-251/2013 (AUGUST 2013)

VIRCATOR - A High Power Microwave Source
PRIYAVANDA J. RATHOD, RAJESH KUMAR, V.P. ANITHA, ANURAG SHYAM and
Y.C. SAXENA
IPR/TR-252/2013 (AUGUST 2013)

Ignitron Trigger Generator for SYMPLEx
PRIYAVANDA J. RATHOD, V.P. ANITHA, and Y.C. SAXENA
IPR/TR-253/2013 (AUGUST 2013)

Design Development and Testing of Pulse Forming Network for Plasma Source of SYMPLEx
PRIYAVANDA J. RATHOD, V.P. ANITHA, Z.H. SHOLAPURWALA and Y.C. SAXENA
IPR/TR-254/2013 (AUGUST 2013)

Design and Testing of a PFN for SYMPLEx
PRIYAVANDA J. RATHOD, V.P. ANITHA, Z.H. SHOLAPURWALA and Y.C. SAXENA
IPR/TR-255/2013 (SEPTEMBER 2013)

Neutron Flux Measurement of an Accelerator based 14-MeV Neutron Generator
SUDHIRSINH VALA, MITUL ABHANGI, RAJNIKANT MAKWANA, CVS RAO, and
T.K.BASU
IPR/TR-256/2013 (SEPTEMBER 2013)

Plasma Torch Stabilization with IGBT based Power Supply through Embedded Control
System Design

C. PATIL, V. JAIN, B. K. PATEL, A. VISANI, and V. CHAUHAN
IPR/TR-257/2013 (SEPTEMBER 2013)

Development of Large Scale Atmospheric Pressure Plasma System for Angora Wool Treatment

R. RANE, A. VAID, C. PATIL, S. MUKHERJEE, and S. NEMA
IPR/TR-258/2013 (OCTOBER 2013)

RELAP5/MOD4.0 MODIFICATION for IN-LLCB TBS Safety Analysis and Preliminary Validation of the Code for Steady State Lead Lithium Eutectic Applications
K. TONY SANDEEP, VILAS C CHAUDHARI, R. BHATTACHARYAY, A. PATEL, and E. RAJENDRA KUMAR
IPR/TR-259/2013 (OCTOBER 2013)

Determination of Air Activation for the Proposed Neutron Generator Laboratory
RAJNIKANT MAKWANA, SUDHIRSINH VALA, C. V. S. RAO, and T. K. BASU
IPR/TR-260/2013 (OCTOBER 2013)

Langmuir Probe Diagnostic Electronic for SYMPLE (System for Microwave Plasma Experiments)
PRAMILA, JIGNESH PATEL, R. RAJPAL, R.JHA, ANITHA V.P, & ELECTRONICS GROUP
IPR/TR-261/2013 (NOVEMBER 2013)

Efficiency Calibration of the High Purity Germanium Detector
RAJNIKANT MAKWANA, M. ABHANGI, S. MARKO, S. POPOVICHEV, B. SYME, S. CONROY
IPR/TR-262/2013 (NOVEMBER 2013)

Failure Analysis Report of Ceramic Material Used as Insulation of RC Coil In SST-1
P SANTRA, S JAYSWAL, T PAREKH, P BISWAS, P CHAUHAN, H PATEL & S PRADHAN
IPR/TR-263/2013 (NOVEMBER 2013)

Integrated Testing of Microwave Interferometer Systems in SST-1
PRAMILA, R. RAJPAL, R. JHA, C.J. HANSALIA, S.K. PATHAK, P.K. ATREY, U. KUMAR, V. GYANCHANDANI, A. SINHA
IPR/TR-264/2013 (DECEMBER 2013)

Performance of Main Vacuum Pumping System of SST-1 Tokamak
ZIAUDDIN KHAN, FIROZKHAN PATHAN, SIJU GEORGE, KALPESH DHANANI, YUVAKIRAN PARAVASTU, PRATIBHA SEMWAL and SUBRATA PRADHAN
IPR/TR-265/2013 (DECEMBER 2013)

Modeling and Simulation Studies of Ion Extraction System for ECR Ion Source
SUDHIRSINH VALA, D BUTTON and M HOTCHKIS
IPR/TR-266/2013 (DECEMBER 2013)

MDSplus Integration with ICRH SST1 DAC Software
RAMESH JOSHI, MANOJ SINGH, H M JADAV, S V KULKARNI and ICRH GROUP
IPR/TR-267/2013 (DECEMBER 2013)

Studies on Development of Ultrasonic Inspection Technique for Cu-W Monoblock Divertor Assembly
KEDAR BHOPE, MAYUR MEHTA, M.S KHAN and S.S. KHIRWADKAR
IPR/TR-268/2013 (DECEMBER 2013)

Compatibility Study of Plasma Grown Alumina Coating with Pb-17Li under Static Conditions
N. I. JAMNAPARA, A. SARADA SREE, E. RAJENDRA KUMAR, S. MUKHERJEE and A. S. KHANNA
IPR/TR-269/2013 (DECEMBER 2013)

A Sheet Code in Matlab to Demonstrate Nonlinear Oscillations in Unmagnetized and Magnetized Plasma
SOMESWAR DUTTA, SUDIP SENGUPTA, R. SRINIVASAN
IPR/TR-270/2013 (DECEMBER 2013)

Characterization and Calibration of 8-Channel E-Band Heterodyne Radiometer System for SST-1 Tokamak
S. VARSHA, DHARMENDRA KUMAR, S. PRAVEENA, and S.K. PATHAK
IPR/TR-271/2014 (JANUARY 2014)

Design and Analysis of Cooling Scheme for SST-1 Plasma Facing Components
YUVAKIRAN PARAVASTU, ZIAUDDIN KHAN and SUBRATA PRADHAN
IPR/TR-272/2014 (JANUARY 2014)

Design, Analysis, Fabrication, Testing & Commissioning of D-shape Vacuum Chamber for High Heat Flux Test Facility
RAJAMANNAR SWAMY, M.S. KHAN, SAMIR KHIRWADKAR, SUNIL BELSARE, SUDHIR TRIPATHI, DEEPU KRISHNAN, PRAKASH MOUKARIA, NIKUNJ PATEL, TUSHAR PATEL
IPR/TR-273/2014 (JANUARY 2014)

Technical Report on Design, Fabrication, Installation of Radial Control Coil
SNEHAL JAYSWAL, PROSENJIT SANTRA. PRADEEP CHAUHAN, PRABAL BISWAS, Hitesh Patel, TEJAS PAREKH, SUBRATA PRADHAN
IPR/TR-274/2014 (FEBRUARY 2014)

Development of Prototype Hybrid DC Circuit Breaker for Superconducting Magnets Quench Protection

SWATI ROY, DEVEN KANABAR, CHIRAGSINH DODIYA and SUBRATA PRADHAN
IPR/TR-275/2014 (FEBRUARY 2014)

IGBT based Pulsed Power Supply for PVD Applications

NARESH VAGHELA
IPR/TR-276/2014 (FEBRUARY 2014)

Scattering Chamber Design for an Accelerator based 14 MeV Neutron Generator at IPR

P. M. PRAJAPATI, BHAWNA PANDEY, SHRICHAND JAKHAR, SURESH KUMAR, B. K. NAYAK, A. SAXENA, S. V. SURYANARAYANA, N. C. GUPTA, SUDHIRSINH VALA, C. V. S. RAO,
T. K. BASU

IPR/TR-277/2014 (MARCH 2014)

Installation and Testing of 220V, 1500A DC Power Supply at IPR
DEVEN KANABAR, SWATI ROY and SUBRATA PRADHAN
IPR/TR-278/2014 (APRIL 2014)

Simulation Studies for the Deformation in Metal Gaskets for UHV Application

SHISHIR PUROHIT and B RAMESH KUMAR
IPR/TR-279/2014 (ARRIL 2014)

Development, Testing and Integration with DAC of 14 Volt, 450 Ampere DC Regulated Filament Power Supply for 200 kW, 91.2 MHz CWRF Amplifier

BHAVESH R KADIA, KIRIT PARMAR, YSS SRINIVAS, H. M. JADAV, AZAD MAKWANA, S.V. KULKARNI & ICRH GROUP
IPR/TR-280/2014 (MAY 2014)

Design & Simulation of Low Loss Circular Corrugated Waveguide for High Power 42 GHz, 200 kW Gyrotron

JINAL A. MISTRY, SHAIK EJAZUDDIN, S. V. KULKARNI and ICRH GROUP
IPR/TR-281/2014 (MAY 2014)

Design & Simulation of Double Disc Sapphire RF Window for High Power 42 GHz, 200 kW Gyrotron

JINAL A. MISTRY, SHAIK EJAZUDDIN, S. V. KULKARNI and ICRH GROUP
IPR/TR-282/2014 (MAY 2014)

Development of Plasma Aluminizing Process for Inconel (IN 718) Alloys

N. I. JAMNAPARA, S. MUKHERJEE, S. VENUGOPAL, R. S. RANE, N. L. CHAUHAN, S. B. GUPTA, N. VAGHELA, K. KALARIA, B. K. PATEL, C. CHAVDA, N. C. PATEL
IPR/TR-283/2014 (MAY 2014)

Design & Simulation of RF Coaxial Vacuum Window for ICRH System for Tokamak Aditya
SANKET CHAUDHARY, EJAZUDDIN SHAIK, ATUL VARIA, S.V. KULKARNI and
ICRH GROUP

IPR/TR-284/2014 (MAY 2014)

Design & Analysis of RF Switch and Impedance Matching in T-Junction Transmission Line
SANKET V CHAUDHARY, ATUL VARIA, EJAZUDDIN SHAIK, S V KULKARNI and
ICRH GROUP

IPR/TR-285/2014 (MAY 2014)

Design & Analysis of RF Window for 10GHz Realistic Magnetron Coupling
SANKET V CHAUDHARY, EJAZUDDIN SHAIK, S V KULKARNI and ICRH GROUP
IPR/TR-286/2014 (MAY 2014)

Design & Simulation of Single Disc Diamond Window for High Power 42 GHz, 200 kW
Gyrotron

JINAL A. MISTRY, SHAIK EJAZUDDIN, S.V. KULKARNI & ICRH GROUP
IPR/TR-287/2014 (MAY 2014)

Conditioning of SST-1 Tokamak Vacuum Vessel by Baking and Glow Discharge Cleaning
ZIAUDDIN KHAN, SIJU GEORGE, PRATIBHA SEMWAL, KALPESH R. DHANANI,
FIROZKHAN S. PATHAN, YUVAKIRAN PARAVASTU, D. C. RAVAL, GATTU R.
BABU, M.S. KHAN and SUBRATA PRADHAN

IPR/TR-288/2014 (MAY 2014)

Development of Atmospheric Pressure Plasma System to Improve Adhesion between Fabric
and Coating

R. RANE, A.VAID, N.CHANDWANI, S.MUKHERJEE, M.PARIKH, S.BASU, and
S.K.NEMA

IPR/TR-289/2014 (MAY 2014)

Theoretical Calculation and Analysis Modelling for the Effective Thermal Conductivity of
Lithium Metatitanate Pebble Bed

MAULIK PANCHAL, A. SHRIVASTAVA, P. CHAUDHURI, and E. RAJENDRAKUMAR
IPR/TR-290/2014 (MAY 2014)

Material Surface Characterization Facilities at FCIPT

ALPHONSA JOSEPH, PURVI KIKANI, NIRAV JAMNAPARA, MUKESH RANJAN, C.
BALASUBRAMANIAN and S. MUKHERJEE

IPR/TR-291/2014 (JUNE 2014)

DAC Controlled Voltage Variable RF Attenuator for Generating RF Pulses of Different Shapes
and Amplitudes for ICRH System

MANOJ SINGH, HM JADAV, RAMESH JOSHI, SUNIL KUMAR, SRINIVAS YSS, SV KULKARNI, and RF-ICRH GROUP
IPR/TR-292/2014 (JUNE 2014)

GPIB Based Instrumentation and Control System for ADITYA Thomson Scattering Diagnostic
KIRAN PATEL, MAULIK SUTHAR, VISHNU CHAUDHARI, JINTO THOMAS, NEHA SINGH, VISHAL PILLAI, and AJAI KUMAR
IPR/TR-293/2014 (JUNE 2014)

Data Acquisition, Control and Operation of Diagnostics and Vacuum Interface Sections of ICRH-RF systems on SST-1
H. M. JADAV, MANOJ SINGH, RAMESH JOSHI, ATUL VARIA, A. GAYATRI, S.V. KULKARNI and ICRH-RF GROUP
IPR/TR-294/2014 (JULY 2014)

Up gradation of Fiber Optic based Analog Signal Link for ECRH system of SST
HARSHIDA PATEL, POONAM SINGH, SWETA SIDDHPURA, B. K. SHUKLA, JATIN PATEL, N. RAJAN BABU, PRAGNESH DHORAJIYA and CHETAN VIRANI
IPR/TR-295/2014 (JULY 2014)

Experimental and Monte-Carlo Absolute Efficiency Calibration of HPGe γ -ray Spectrometer for Application in Neutron Activation Analysis
SHAILJA TIWARI, S. JAKHAR, M.ABHANGI, R. MAKWANA, V. CHAUDHARI, C.V.S. RAO, T. K. BASU
IPR/TR-296/2014 (JULY 2014)

Developments toward Remote Metrology for SST1 Vacuum Vessel using Close Range Digital Photogrammetry
GATTU RAMESH BABU, ZIAUDDIN KHAN and SUBRATA PRADHAN
IPR/TR-297/2014 (JULY 2014)

Investigations of the Inspection Possibilities of Curved Cu-W Monoblock Assembly Using Ultrasonic Phased Array
KEDAR BHOPE, MAYUR MEHTA, and S.S.KHIRWADKAR
IPR/TR-298/2014 (AUGUST 2014)

Report on Ultrasonic Inspection and Microhardness testing on High Heat Flux tested Cu-W Mono-blocks
KEDAR BHOPE, MAYUR MEHTA, CHARU LATA DUBE, M.S.KHAN, and S.S.KHIRWADKAR
IPR/TR-299/2014 (AUGUST 2014)

480 A DC Power Supply Validation with High TC Based Superconducting Load

UPENDRA PRASAD, PIYUSH RAJ, A.PANCHAL, A.BANO, P.VARMORA, D.KANWAR
and S.PRADHAN
IPR/TR-300/2014 (AUGUST 2014)

Pb-Li Loop for testing Liquid Metal Diagnostics
S. SAHU, R. BHATTACHARYAY, A. DEOGHAR, A. PRAJAPATI, S. GUPTA, and S.
VERMA
IPR/TR-301/2014 (AUGUST 2014)

Development of Micro-controller based EMCCD Camera
VISHNU CHAUDHARI, and AJAI KUMAR
IPR/TR-302/2014 (AUGUST 2014)

Study on Plasma Gasification of Petroleum Waste in to Syn-Gas
A. SANGHARIYAT, P. V. MURUGAN, B.K. PATEL, C. PATIL, V. CHAUHAN, V. JAIN,
S. MUKHERJEE, and S.K. NEMA
IPR/TR-303/2014 (SEPTEMBER 2014)

Control and Data Acquisition System for Characterization of Microwave Components for ECE
Diagnostics in ITER- India Lab
JIGNESH PATEL, PRAVEENA KUMARI, VISMAYSINH RAULJI, SUMAN DANANI,
and RACHANA RAJPAL
IPR/TR-304/2014 (SEPTEMBER 2014)

Detection and Mitigation of Electro-magnetic Interference Noise to Enhance Detection
Sensitivity of SST-1 Thomson Scattering System
VISHNU CHAUDHARI, KIRAN PATEL, JINTO THOMAS and AJAI KUMAR
IPR/TR-305/2014 (SEPTEMBER 2014)

Steady State CFX and Structural Analysis of the ITER-like Shield Blanket Module First Wall
Mock Up
RITESH KUMAR SRIVASTAVA and PARITOSH CHAUDHURI
IPR/TR-306/2014 (SEPTEMBER 2014)

Design, Fabrication and Testing of Variable di/dt, (10MA/sec max) Current Pulse Generation
System for SST-1 Rogowski Calibration
Y.S.S. SRINIVAS, M.V. GOPALA KRISHNA, BHAVESH KADIA, SAMEER KUMAR,
E.V. PRAVEEN LAL, D. RAJU, S.V. KULKARNI, and R. JHA
IPR/TR-307/2014 (SEPTEMBER 2014)

Slowing and Stopping of Wave in Dispersive Metamaterial Loaded Helical Guide
DUSHYANT K. SHARMA, and SURYA K. PATHAK
IPR/TR-308/2014 (SEPTEMBER 2014)

Commissioning of Integrated Power Supply (15kV, 28A and three auxiliary supplies) for Testing of 200kW stage CWRF Amplifiers

BHAVESH R KADIA, Y.S.S. SRINIVAS, KIRIT M PARMAR, H. M. JADAV, RAMESH JOSHI, SUNIL KUMAR, S. V. KULKARNI, and ICRH GROUP

IPR/TR-309/2014 (SEPTEMBER 2014)

Measurement of Threshold Voltage during Vacuum Arc on Satellite Solar Panel Coupons in Laboratory

R. JOSHI and S. B. GUPTA

IPR/TR-310/2014 (OCTOBER 2014)

Development of an ESD Detection and Characterization Facility for Space like LEO and GEO Environment

S. B. GUPTA, K. R. KALARIA, N. P. VAGHELA, R. S. JOSHI, S. MUKHERJEE, S. E. PUTHANVEETTIL, M. SHANKARAN and R.S. EKKUNDI

IPR/TR-311/2014 (OCTOBER 2014)

Behavior of Arc Current Waveform on Satellite Solar Panels and its Dependence on Arc Location, Dissipated Charge and Irradiation Time

RASHMI S. JOSHI, and SURYAKANT B. GUPTA

IPR/TR-312/2014 (OCTOBER 2014)

Calorimetric Pulse Power Measurement Technique for High Power Gyrotrons

HARSHIDA PATEL, B. K. SHUKLA, PRAGNESH DHORAJIYA, RAJAN BABU, JATIN PATEL, MIKHAIL SHMELEV, YURY BELOV, R. JHA, and D. BORA

IPR/TR-313/2014 (OCTOBER 2014)

An update of spacecraft charging research in India: Spacecraft Plasma Interaction eXperiments - SPIX-II

SURYAKANT B. GUPTA, S. MUKHERJEE, KEENA R. KALARIA, NARESH P. VAGHELA, RASHMI S. JOSHI, SURESH E. PUTHANVEETTIL, M. SANKARAN AND RANGANATH S. EKKUNDI

IPR/TR-314/2014 (NOVEMBER 2014)

Amendment of Signal Conditioning System for Neutral Beam Injector of SST-1

KARISHMA QURESHI, P. J. PATEL, L. K. BANSAL, P. BHARATHI, S. L. PARMAR, L. N. GUPTA, VIJAY VADHER, DIPAL THAKKAR, C. B. SUMOD, B. CHOKSI, S. SHARMA, M. R. JANA, V. PRAHLAD and U. K. BARUAH

IPR/TR-315/2014 (NOVEMBER 2014)

Experimental Study for Water and Ferritic Steel Shielding Properties with 14MeV Neutron Irradiation of Double Wall Shell

S. JAKHAR, B. RAMESH KUMAR, R. MAKWANA, M. ABHANGI, C. V. S. RAO and T. K. BASU

IPR/TR-316/2014 (NOVEMBER 2014)

Coolant Calorimetry Set-Up Developed for the High Heat Flux Test Facility at IPR
YASHASHRI PATIL, S. S. KHIRWADKAR, SUNIL BELSARE, RAJAMANNAR SWAMY, SUDHIR TRIPATHI, and KEDAR BOPE
IPR/TR-317/2014 (NOVEMBER 2014)

Magnetic Field Analyses, Fabrication and Validation of Mono-Filamentary MgB₂ based Racetrack Coil

ANANYA KUNDU, PIYUSH RAJ, UPENDRA PRASAD, ARUN PANCHAL, ANEES BANO, PANKAJ VARMORA, SUBRAT KUMAR DAS, NITISH KUMAR, DHAVAL BHAVSAR, and SUBRATA PRADHAN

IPR/TR-318/2015 (JANUARY 2015)

Development of Tangential View Far Infrared Interferometer for SST- 1
RAJWINDER KAUR, ASHA ADHIYA, PABITRA KUMAR MISHRA, SWADESH PATNAIK, and SHRISHAIL PADASALAGI

IPR/TR-319/2015 (JANUARY 2015)

Testing of Process Sensors for High-Temperature & High-Pressure Liquid-Metal Applications

A. SARASWAT, S. SAHU, A.K. PRAJAPATI, S. GUPTA, T. S. RAO, R. P. BHATTACHARYAY, and P. DAS

IPR/TR-320/2015 (JANUARY 2015)

LSPR Anisotropy in Template Aligned Silver Nanoparticles: A Case of Biaxial Metal Optics

MUKESH RANJAN, MUKUL BHATNAGAR, and S. MUKHERJEE

IPR/TR-321/2015 (JANUARY 2015)

Interface of LHE Level Monitor as an Interlock with Quench Detection System for the Gyrotron Magnet System

MONI BANAUDHA, YOHAN KHRISTI, PIYUSH RAJ, and SUBRATA PRADHAN

IPR/TR-322/2015 (JANUARY 2015)

Silver Nanoparticle on GaSb Nanodot: A LSPR Boosted Binary Platform for Broadband Light Harvesting and SERS

MUKUL BHATNAGAR, MUKESH RANJAN, and SUBROTO MUKHERJEE

IPR/TR-323/2015 (JANUARY 2015)

Experimental Validation of Negative Refraction of Novel Single-Sided FF-Shaped Metamaterial

DUSHYANT KUMAR SHARMA, JHU BUCH, and SURYA KUMAR PATHAK

IPR/TR-324/2015 (FEBRUARY 2015)

Design and Development of a 200kV, 15mA High Voltage DC Test Generator

AMAL S, URMIL M THAKER, KUMAR SAURABH, and UJJWAL K BARUAH
IPR/TR-325/2015 (FEBRUARY 2015)

Design, Implementation and Optimization of Gigabit Ethernet Network for I&C Interfacing at High Heat Flux Test Facility
R. SUGANDHI, T. PATEL, R.ROSHAN, I. ANTWALA, and S. KHIRWADKAR
IPR/TR-326/2015 (FEBRUARY 2015)

Frequency Sweep Linearization of Scanned Frequency Reflectometer System for Plasma Density Profile Measurement
N.Y. JOSHI, J.J.U. BUCH, and S.K. PATHAK
IPR/TR-327/2015 (FEBRUARY 2015)

Determination of Heat Transfer Effectiveness of Thermal Insulating Materials for High Temperature Process Pipes
ADITYA KUMAR VERMA, S. VERMA, A. SARASWAT, J. CHAUHAN, E. R. KUMAR, and K.N.VYAS
IPR/TR-328/2015 (MARCH 2015)

Nuclear Performance Analyses of Indian LLCB TBM Set for ITER: Conceptual Design
H L SWAMI, A K SHAW, and C DANANI
IPR/TR-329/2015 (MARCH 2015)

Design and Development of Extremely Low Ripple and Highly Stabilised DC Power Supply Rated for 30V, 300A
AZADSINH MAKWANA, CHIRAGKUMAR DODIYA, BHADRESH PARGHI, and SUBRATA PRADHAN
IPR/TR-330/2015 (MARCH 2015)

State Feedback Control of Chopper Fed DC Motor using Linear Quadratic Regulator Method in MATLAB-SIMULINK
AMIT K SRIVASTAVA, ARNAB DAS GUPTA, NITYA SRIVASTAVA, and ZIAUDDIN KHAN
IPR/TR-331/2015 (MARCH 2015)

Development of PXI based Data Acquisition and Control (DAC) system for RF-ICRH system
MANOJ SINGH, HM JADAV, RAMESH JOSHI, YSS SRINIVAS, SUNIL KUMAR, SV KULKARNI, and RF-ICRH GROUP
IPR/TR-332/2015 (MARCH 2015)

Design and Development of PLC based DAC for 45.6 MHz, 100kW ICRH system using EPICS and MODBUS/TCP
RAMESH JOSHI, H M JADAV, YSS SRINIVAS, SUNIL KUMAR, and S.V. KULKARNI
IPR/TR-333/2015 (MARCH 2015)

Experimental Test Set up To Evaluate Spring Back in Superconducting CICC' s at Room Temperature

ARUN PANCHAL, MAHESH GHATE, DHAVALBHAVSAR, and SUBRATA PRADHAN
IPR/TR-334/2015 (MARCH 2015)

Application of Articulated Absolute Co-ordinate Measuring Machine for Quality Control in Fabrication of Radial Plates

DHAVAL BHAVSAR, MAHESH GHATE, ARUN PANCHAL, and SUBRATA PRADHAN
IPR/TR-335/2015 (MARCH 2015)

Development of Hardware for Liquid Flow Measurement with LabVIEW

AMIT KUMAR SRIVASTAVA, SURYAKANT B. GUPTA, and DIPAK ADHYARU
IPR/TR-336/2015 (MARCH 2015)

Design, Fabrication and Development of Lab Scale Vacuum Heat Treatment Furnace
DHAVAL BHAVSAR, PIYUSH RAJ, MAHESH GHATE, CHIRAG DODIYA, and

SUBRATA PRADHAN

IPR/TR-337/2015 (MARCH 2015)

Development, Integration and Testing of Automated Triggering Circuit for Hybrid DC Circuit Breaker

DEVEN KANABAR, SWATI ROY, CHIRAGKUMAR DODIYA, and SUBRATA PRADHAN

IPR/TR-338/2015 (APRIL 2015)

Design, development and results from a Charge-Collector diagnostic for a Toroidal Electron Plasma Experiment

SAMBARAN PAHARI, LAVKESH LACHHVANI, MANU BAJPAI, KARAN RATHOD, YOGESH YEOLE, and P. K. CHATTOPADHYAY

IPR/TR-339/2015 (APRIL 2015)

Electron Beam Profile Measurement Set-Up for High Heat Flux Test Facility at IPR

YASHASHRI PATIL, S. S. KHIRWADKAR, S. M. BELSARE, RAJAMANNAR SWAMY, K. GALODIYA, N. PATEL, T. PATEL, and P. MOKARIYA

IPR/TR-340/2015 (APRIL 2015)

Performance Study of Outgassing System Incorporating Air Baking

PARESH PANCHAL, SAMIRAN SHANTI MUKHERJEE, JYOTI AGARWAL, and RANJANA GANGRADEY

IPR/TR-341/2015 (APRIL 2015)

ICRH DAC Software Modification for Aditya Experiment Requirements

RAMESH JOSHI, H M JADAV, MANOJ PARIHAR, B R KADIA, K M PARMAR, A VARIA, GAYATRI ASHOK, Y S S SRINIVAS, SUNIL KUMAR, and S.V. KULKARNI
IPR/TR-342/2015 (MAY 2015)

Conceptual & Engineering Design of Plug-in Cryostat Cylinder for Super-Conducting Central Solenoid of SST-1

PROSENJIT SANTRA, PRABAL BISWAS, KIRIT VASAVA, SNEHAL JAYSWAL, TEJAS PEREKH, PRADEEP CHAUHAN, Hitesh Patel, and SUBRATA PRADHAN
IPR/TR-343/2015 (MAY 2015)

Design, Development, Integration and Testing of Glass Fiber Optic Based Control Signal for Remote Operation of RHVPS

MANOJ SINGH, HM JADAV, YSS SRINIVAS, PARESH PATEL, SUNIL KUMAR, and SV KULKARNI

IPR/TR-344/2015 (MAY 2015)

Design and Development of PLC based Offline Impedance Matching System for ICRH Experiment

RAMESH JOSHI, H M JADAV, ANIRUDDH MALI, S V KULKARNI, and ICRH GROUP
IPR/TR-345/2015 (MAY 2015)

LabVIEW Based Prototype Software for High Power ICRH DAC

RAMESH JOSHI, H M JADAV, ANIRUDDH MALI, YSS SRINIVAS, SUNIL KUMAR, S V KULKARNI and ICRH GROUP

IPR/TR-346/2015 (MAY 2015)

Analog Input Modules (IP320, IP330) Driver Development and Integration with ICRH DAC Software

RAMESH JOSHI, H M JADAV, S V KULKARNI, and ICRH GROUP
IPR/TR-347/2015 (MAY 2015)

Eight Channel, Scalable, Optical Gate Control Circuit for 4kV Series IGBT DC Switch
BHAVESH R KADIA, MANDEEPSINGH CHHABADA, YSS SRINIVAS, S.V. KULKARNI, and ICRH GROUP
IPR/TR-348/2015 (MAY 2015)

Indigenously Developed Bending Strain Setup for I-V Characterization of Superconducting Tapes and Wires

ARUN PANCHAL, ANEES BANO, MAHESH GHATE, PIYUSH RAJ, and SUBRATA PRADHAN
IPR/TR-349/2015 (MAY 2015)

Development of Cryostat for Pulse Tube Cryocooler system

DHAVAL BHAVSAR, ANANYA KUNDU, ANEES BANO, MAHESH GHATE, and
SUBRATA PRADHAN

IPR/TR-350/2015 (JUNE 2015)

Design, Fabrication, Installation of In-Vessel Coil of SST-1 Tokamak
SNEHAL JAYSWAL, PRADEEP CHAUHAN, PROSENJIT SANTRA, HITESH PATEL,
TEJAS PAREKH, PRABAL BISWAS, and SUBRATA PRADHAN

IPR/TR-351/2015 (JULY 2015)

Establishment of Helium Recovery System at IPR
SAMIRAN MUKHERJEE, RANJANA GANGRADEY, SRINIVASAN
KASTHURIRENGAN, PARESH PANCHAL, and JYOTI SHANKAR MISHRA
IPR/TR-352/2015 (JULY 2015)

Numerical Studies on HHF Test Mono-Block for Divertor Applications

K. SATPATHY and S.S. KHIRWADKAR

IPR/TR-353/2015 (JULY 2015)

LabVIEW based 80 Channel Data Acquisition for ICRH-RF Transmission Lines and
Diagnostics

RAMESH JOSHI, H M JADAV, ANIRUDDH MALI, S V KULKARNI & ICRH GROUP

IPR/TR-354/2015 (JULY 2015)

Conceptual Design Report of Experimental Set-Up for Determining Hydrogen Isotope
Solubility in Liquid Pb-Li

SUDHIR RAI and AMIT SIRCAR

IPR/TR-355/2015 (AUGUST 2015)

Non-destructive Testing of Macro-brush type mock-ups of the Plasma Facing Component
using different Infrared Thermography Techniques

SANTOSH P. PANDYA, SHWETANG N. PANDYA, YASHASHRI V. PATIL , DEEPU S.
KRISHNAN, MENAKA MURUGESAN, D. SHARATH, KONGKHAN PREMJIT SINGH,
MD. SHOAIB KHAN, M. ARAFAT, N. BIJU, SAMIR S. KHIRWADKAR,
JAGANNATHAN GOVIDARAJAN, B. VENKATRAMAN and KRISHNAN
BALASUBRAMANIAM

IPR/TR-356/2015 (AUGUST 2015)

Commissioning of 10kVDC, 7A and 12VAC, 120A Integrated Power Supply for Triode based
20KW Stage CWRF Amplifiers

KIRIT M PARMAR, BHAVESH R. KADIA, Y S S SRINIVAS, H. M. JADAV, RAMESH
JOSHI, S. V. KULKARNI and ICRH Group

IPR/TR-357/2015 (AUGUST 2015)

Process Automation System for Integration and Operation of Large Volume Plasma Device

R. SUGANDHI, P. K. SRIVASTAVA, A. K. SANYASI, PRABHAKAR SRIVASTAV, L. M. AWASTHI and S. K. MATTOO
IPR/TR-358/2015 (SEPTEMBER 2015)

Determination of Plasma Temperature in SST-1
SHARAD KUMAR YADAV, P. K. KAW, A. DAS, S. K. PATHAK, S. JOISA, D. RAJU and
SST-1 TEAM
IPR/TR-359/2015 (OCTOBER 2015)

Revisiting Timing and Synchronization for Multi Module Data Acquisition System on PXIe Bus
R. SUGANDHI, P. K. SRIVASTAVA, P. SRIVASTAV, A. K. SANYASI, L. M. AWASTHI,
V. PARMAR, K. MAKADIA, I. PATEL and S. SHAH
IPR/TR-360/2015 (OCTOBER 2015)

Design of 4 kV, 1A Series Connected IGBT Switch for the Protection of Triode Based 2kW Stage ICRF Amplifier
BHAVESH R KADIA, MANDEEPSINGH CHHABADA, Y. S. S. SRINIVAS, S. V. KULKARNI and ICRH Group
IPR/TR-361/2015 (NOVEMBER 2015)

Ultrasonic Evaluation of Electron Beam (EB) Welded CuCrZr to CuCrZr joints presents in Heat Transfer Element of SPIDER Beam Dump
KEDAR BHOPE, Hitesh Patel, ALPESH PATEL, JAINISH TOPIWALA, MAYUR MEHTA, CHANDRAMOULI ROTTI and SAMEER KHIRWADKAR
IPR/TR-362/2015 (DECEMBER 2015)

Digital Signal Processing on FPGA for Plasma Diagnostics
RACHANA RAJPAL, Hitesh MANDALIYA, PRAMILA GAUTAM, PRAVEEN, VISMAJ, UMESH, S. K. PATHAK, P. K. ATREY and R. JHA
IPR/TR-363/2015 (DECEMBER 2015)

Plasma Pyrolysis Technology and its evolution at FCIPT, Institute for Plasma Research, India
S. K. NEMA, V. JAIN, K. S. GANESHPRASAD, A. SANGHARIYAT, S. SONI, C. PATIL, V. CHAUHAN and P. I. JOHN
IPR/TR-364/2016 (JANUARY 2016)

Calculation of Error Matrix using Finesse for the supervisory control of an optical cavity
S. SUNIL, AMIT K. SRIVASTAVA and ZIAUDDIN KHAN
IPR/TR-365/2016 (JANUARY 2016)

Design of High Pressure High Temperature Water Circulation System for High Heat Flux Test Facility
RAJAMANNAR SWAMY, S. S. KHIRWADKAR, and PRASHANT SINGH

IPR/TR-366/2016 (JANUARY 2016)

A 5 kA Pulsed Power Supply for Inductive and Plasma Loads in LVPD

P. K. SRIVASTAVA, S. K. SINGH, A. K. SANYASI, L. M. AWASTHI and S. K. MATTOO

IPR/TR-367/2016 (JANUARY 2016)

Design Optimization of Beam Transport System for Accelerator based 14-MeV Neutron Source

ASHA PANGHAL, SUDHIRSINH VALA, A.MANDAL, S. KUMAR, G.O. RODRIGUES, C. V. S. RAO, T. K. BASU and B. SARKAR

IPR/TR-368/2016 (JANUARY 2016)

Thermal Hydraulic Analysis of Liquid Helium Flow through Cryopanel

SAMIRAN MUKHERJEE, RANJANA GANGRADEY, REENA SAYANI, PRATIK NAYAK, and PARESH PANCHAL

IPR/TR-369/2016 (JANUARY 2016)

EPICS Interfacing to Atmega2560 Microcontroller using Bit Stream Data Transfer Serial Communication Protocol

ARNAB DAS GUPTA, AMIT K SRIVASTAVA, S. SUNIL, and ZIAUDDIN KHAN

IPR/TR-370/2016 (FEBRUARY 2016)

Electrical characterization of prototype JET ELM control coils

DEVEN KANABAR, SWATI ROY, MAHESH GHATE, PIYUSH RAJ, ANANYA KUNDU, NITISH KUMAR, DHAVAL BHAVSAR, ARUN PANCHAL and SUBRATA PRADHAN

IPR/TR-371/2016 (MARCH 2016)

Cabling Technology for Manufacturing of Fusion Relevant Superconducting CICC Cables at IPR

MAHESH GHATE, PIYUSH RAJ, ARUN PANCHAL, DHAVAL BHAVSAR and SUBRATA PRADHAN

IPR/TR-372/2016 (MARCH 2016)

Surface modification of Brass Valves using Environment Friendly Plasma Process

S. K. NEMA, P. KIKANI, A. SANGHARIYAT, B. K. PATEL, S. K. GUPTA and N. JAMNAPARA

IPR/TR-373/2016 (MARCH 2016)

Design and development of Seal Force Test facility for Axial Isolation Valve Seal

VRUSHABH LAMBADE, JYOTI AGARWAL, PARESH PANCHAL, SAMIRAN MUKHERJEE, JYOTI SHANKAR MISHRA and RANJANA GANGRADEY

IPR/TR-374/2016 (MARCH 2016)

An overview of Outgassing rate of different structural materials and its measurement

MOHSIN BUKHARI, SAMIRAN MUKHERJEE, PARESH PANCHAL, AJITKUMAR SHUKLA and RANJANA GANGRADEY
IPR/TR-375/2016 (MARCH 2016)

Performance and Capabilities of CNC Abrasive Waterjet Cutting machine on R&D works for Divertor Division

SUDHIR TRIPATHI, K. P. SINGH, NIKUNJ PATEL and S. S. KHIRWADKAR
IPR/TR-376/2016 (MARCH 2016)

Techniques to Measure Hydrogen Content in SS 304L

MANOJ KUMAR GUPTA, ABHINAV PRIYADARSHI, NAVNEET MANWAL and ZIAUDDIN KHAN
IPR/TR-377/2016 (MARCH 2016)

Commissioning of Screen Grid PowerSupply 2kV, 12A (SGPS) for Testing of Tetrode based 1.5MW stage CWRF Amplifiers

KIRIT M. PARMAR, BHAVESH R. KADIA, Y. S. S. SRINIVAS, S. V. KULKARNI and ICRH GROUP
IPR/TR-378/2016 (MARCH 2016)

Optimisation of Thermal Zone of 3-Stream (He-He-He) Platefin Heat Exchanger for Helium Plant

A. K. SAHU, O. MAHAPATRA, P SHARMA, B. V. SHAH and R. K. SAHOO
IPR/TR-379/2016 (APRIL2016)

Finding Friction Factor for Low Temperature Helium Flow through Serrated Type Plate-Fin Heat Exchanger Using CFD

B. V. SHAH, A. K. SAHU, N. MAMGAIN, S. V. JAIN and P. SHARMA
IPR/TR-380/2016 (APRIL2016)

Development of Prototype Nb₃Sn Praying Hand Joint for SST-1 New Superconducting Central Solenoid Winding Pack

U. PRASAD, A. PANCHAL, P. RAJ, P. VARMORA and S. PRADHAN
IPR/TR-381/2016 (APRIL2016)

Conceptual Design Report for Development of Hydrogen Isotopes Removal System

V. GAYATHRI DEVI, DEEPAK YADAV, and AMIT SIRCAR
IPR/TR-382/2016 (APRIL2016)

Sealing Performance of Non-Metallic Gaskets with Indium Wire Seal at Temperatures Down to 10K for High Vacuum and Thermal Insulation Application in a Screw Extruder System

PARESH PANCHAL, SAMIRAN SHANTI MUKHERJEE, PRATIK NAYAK, JYOTI SHANKAR MISHRA, JYOTI AGRAWAL, and RANJANA GANGRADEY
IPR/TR-383/2016 (MAY2016)

Establishment and Validation of "Unit for Thermal Properties Assessment at Low Temperature"(UTPAL) at IPR

JYOTI AGARWAL, JYOTISHANKAR MISHRA, VRUSHABH LAMBADE, S. KASTURIRANGAN, RANJANA GANGRADEY and SAMIRAN MUKHERJEE
IPR/TR-384/2016 (MAY2016)

Kinetics Studies of Carbon Doped Amorphous Nano- Boron in MgB₂ Phase
NITISH KUMAR, SUBRAT KUMAR DAS and SUBRATA PRADHAN
IPR/TR-385/2016 (JUNE 2016)

Hollow Circular Acrylic Waveguides for Far Infrared Interferometer of SST-1
ASHA ADHIYA, RAJWINDER KAUR and PABITRA KUMAR MISHRA
IPR/TR-386/2016 (JUNE 2016)

Development, Optimization and Validation of Ultrasonic Testing for NDE of ELM Coils
K. BHOPE, M. GHATE, M. MEHTA, A. PANCHAL, S. PRADHAN and S. KHIRWADKAR
IPR/TR-387/2016 (JUNE 2016)

Design Study of a Vacuum Chamber for Hydrogen Solidification System
SANDIP ROY, JYOTISHANKAR MISHRA, RANJANA GANGRADEY and KARTIK KOTHARI
IPR/TR-388/2016 (JUNE 2016)

FPGA Based Electronics for Controlling High Voltage Biasing of Photomultiplier Tube Detector in Spectroscopy Diagnostic
MINSHA SHAH, Hitesh MANDALIYA, RACHANA RAJPAL and ELECTRONICS GROUP
IPR/TR-389/2016 (JUNE 2016)

Design and Development of LN₂ Based Hydrogen Gas Pre-Cooler, with its Initial Experimental Study using Helium Gas
P. NAYAK, S. MUKHERJEE, P. PANCHAL, D. TRIPATHI, R. GANGRADEY, J. MISHRA and J. AGARWAL
IPR/TR-390/2016 (JUNE 2016)

Gated Integrator PXI-DAQ System for Thomson Scattering Diagnostics
KIRAN PATEL, VISHAL PILLAI, NEHA SINGH, JINTO THOMAS and AJAI KUMAR
IPR/TR-391/2016 (JUNE 2016)

Conceptual Design of Cuboid Shaped Vacuum Cryostat for Twin Screw Hydrogen Extruder
PARESH PANCHAL, DEVESH TRIPATHI, SAMIRAN MUKHERJEE and RANJANA GANGRADEY
IPR/TR-392/2016 (JULY 2016)

Conceptual Design Report of Experimental Loop for Hydrogen Isotopes Extraction from Liquid Pb-Li
RUDREKSH B. PATEL, SUDHIR RAI and AMIT SIRCAR
IPR/TR-393/2016 (JULY 2016)

Development and Testing of Visual Inspection Applications for Tokamak Maintenance
PRAMIT DUTTA, NAVNEEN RASTOGI, SHREYA JOSHI, AKSHAY PATEL, MIHIR TRIVEDI and K. K. GOTEWAL

IPR/TR-394/2016 (JULY 2016)

Open Loop Control of Filament Heating Power Supply for Large Volume Plasma Device
R. SUGANDHI, P. K. SRIVASTAVA, A. K. SANYASI, P. SRIVASTAV, L. M. AWASTHI
and S. K. MATTOO

IPR/TR-395/2016 (AUGUST 2016)

Data Acquisition System for LN₂ Cool Down Experiment for 6 Nos. of Cryogenics Pumps
KARISHMA QURESHI, P. J. PATEL, C. CHAKRAPANI, S. L. PARMAR, L. K. BANSAL,
B. PANDYA, DIPAL THAKKAR, C. B. SUMOD, L. N. GUPTA, VIJAY VADHER, B.
CHOKSI, NILESH CONTRACTOR, S. K. SHARMA, SRIDHAR, RAMBABU,
BHARATHI, M. R. JANA, V. PRAHLAD and U. K. BARUAH

IPR/TR-396/2016 (AUGUST 2016)

Artificial Neural Network for Yield Strength Prediction of Irradiated RAFM Steels
H. T. IYER and A. ABHISHEK
IPR/TR-397/2016 (AUGUST 2016)

Electromagnetic and Structural Analysis of Jet Elm Control Coil Support Structure
PRAMIT DUTTA, MANOAHSTEPHEN MANUELRAJ, NAVEEN RASTOGI and
CHRISTOPHER LOWRY
IPR/TR-398/2016 (SEPTEMBER 2016)

Preliminary Design and Assessment of Beam Tube for Laser Interferometer Gravitational
Wave Observatory (LIGO)-India Project
RAKESH KUMAR, YUVAKIRAN PARAVASTU and ZIAUDDIN KHAN
IPR/TR-399/2016 (SEPTEMBER 2016)

Development of Driver Amplifier Stage for Generator of the ADITYA ICRH System
SUNIL KUMAR, D. BORA, S.V. KULKARNI and HIGH POWER ICRH SYSTEMS
DIVISION
IPR/TR-400/2016 (SEPTEMBER 2016)

Development of Pre-Driver Amplifier Stage for Generator of the ADITYA ICRH System
SUNIL KUMAR, D. BORA, S.V. KULKARNI and HIGH POWER ICRH SYSTEMS
DIVISION
IPR/TR-401/2016 (SEPTEMBER 2016)

Development and Testing Of Prototype Soft X-Ray Camera Using 16channel AXUV
Photodiode Array for Aditya Tokamak
JAYESH RAVAL, S. PUROHIT, Y.S. JOISA, A.K. CHATTOPADHYAY, PRAVEENA
KUMARI, VISMAYSINH RAULJI, MINSHA SHAH and RACHANA RAJPAL
IPR/TR-402/2016 (SEPTEMBER 2016)

Specimen Preparation Procedure for Studies using Transmission Electron Microscope (TEM)
A. SATYAPRASAD, C. BALASUBRAMANIAN and S. MUKHERJEE
IPR/TR-403/2016 (OCTOBER 2016)

Low Cost, Light Weight 100kV Galvanic Isolated Control Power Supplies
BHAVESH R. KADIA, K. M. PARMAR, Y. S. S. SRINIVAS and S. V. KULKARNI

IPR/TR-404/2016 (OCTOBER 2016)

Study of Requirement and Possibility of using Mechanical and Temperature Sensors on LLCB TBM

RITESH KUMAR SRIVASTAVA and PARITOSH CHAUDHURI

IPR/TR-405/2016 (OCTOBER 2016)

Outgassing Measurement of Various Activated Carbon Sorbents for Application in Prototype Cryopump

PARESH PANCHAL, SAMIRAN MUKHERJEE and RANJANA GANGRADEY

IPR/TR-406/2016 (NOVEMBER 2016)

Electron Beam Welding Scenario: Non - Vacuum / Partial Vacuum

GAUTAM R. VADOLIA and K. P. SINGH

IPR/TR-407/2016 (NOVEMBER 2016)

Implementation of Object Oriented Software Engineering on Labview Graphical Design Framework for Data Acquisition in Large Volume Plasma Device

R. SUGANDHI, P. K. SRIVASTAVA, PRABHAKAR SRIVASTAV, A. K. SANYASI, L. M. AWASTHI, V. PARMAR, K. MAKADIA, I. PATEL and S. SHAH

IPR/TR-408/2016 (NOVEMBER 2016)

Design and Analysis of Manifolds for Indian HCCB Blanket Module

DEEPAK SHARMAA, PARITOSH CHAUDHURIA, ALICE YING

IPR/TR-409/2016 (NOVEMBER 2016)

Virtual Reality Applications in Remote Handling Development for Tokamaks in India

PRAMIT DUTTA, NAVEEN RASTOGI and KRISHAN KUMAR GOTEWAL

IPR/TR-410/2016 (DECEMBER, 2016)

Design and Optimization Study of First Wall for Indian HCCB Blanket Module

DEEPAK SHARMA, PARITOSH CHAUDHURI and ALICE YING

IPR/TR-411/2016 (DECEMBER, 2016)

Design of Efficient Oil Coalescer for Helium Compressor and Oil Removal System

V.B PATEL, A.K SAHU and K. PURANI

IPR/TR-412/2016 (DECEMBER, 2016)

A Technical Report on Radiation Shielding Calculation for the LINAC facility (IPR-SPEAR)

LALIT GUPTA, M. K. NAYAK, HARIDAS G. and RAVI A. V. KUMAR

IPR/TR-413/2016 (DECEMBER, 2016)

Development of a Prototype Work-Cell for Validation of ITER Remote Handling Control System Standards

NAVEEN RASTOGI, VAMSHI KRISHNA, PRAMIT DUTTA, MANOAH STEPHEN,

KRISHAN KUMAR GOTEWAL, DAVID HAMILTON and J. K. MUKHERJEE

IPR/TR-414/2016 (DECEMBER, 2016)

Development of Output Amplifier Stage for Generator of the Aditya ICRH System

SUNIL KUMAR, D. BORA, S. V. KULKARNI and HIGH POWER ICRH SYSTEMS DIVISION
IPR/TR-415/2017 (JANUARY, 2017)

Design, Fabrication and Initial Testing of the Output Amplifier Stage for Generator of the SST-1 ICRH System
SUNIL KUMAR, D. BORA, S.V. KULKARNI and HIGH POWER ICRH SYSTEMS DIVISION
IPR/TR-416/2017 (JANUARY, 2017)

Lab Scale Experiment Study to Explore Thermal Deformation of P91 Structural Material with the use of Strain Gauges
RITESH KUMAR SRIVASTAVA, ABHISHEK SARASWAT and PARITOSH CHAUDHURI
IPR/TR-417/2017 (FEBRUARY, 2017)

Apparent Porosity and Bulk Density Measurement of Lithium Meta-Titanate Pebbles by Kerosene Intrusion & Archimedes Method
MAYANK MAKWANA, A. SHRIVASTAVA, M. PANCHAL, P. CHAUDHURI and E. RAJENDRAKUMAR
IPR/TR-418/2017 (MARCH, 2017)

Concept of Twin Screw Extruder for Solid Hydrogen Extrusion
SAMIRAN SHANTI MUKHERJEE, RANJANA GANGRADEY, DEVESH TRIPATHI, PARESH PANCHAL, PRATIK NAYAK, JYOTI SHANKAR MISHRA, JYOTI AGARWAL and KRISHANPAL PATIDAR
IPR/TR-419/2017 (MARCH, 2017)

SST-1 NBI: 6 Cryopumps Parallel Cooldown and Operational testing with LN2
CH. CHAKRAPANI, B. SRIDHAR, P. BHARGAV, Q. KARISHMA, C. NILESH, P. SANJAY and C. BHARGAV
IPR/TR-420/2017 (MARCH, 2017)

A Report on Crush Load of Lithium Ceramic Pebbles
SURAJ KUMAR GUPTA, MAULIK PANCHAL, RISCOB JAMES BRIGHT, AROH SRIVASTAVA, MAYANK MAKWANA and PARITOSH CHAUDHURI
IPR/TR-421/2017 (MARCH, 2017)

FPGA Based Reconfigurable Digital Filter in Measurement System for Plasma Diagnostic
AARTI N. ODEDARA, V. CHAUDHARI and A. H. DAFDA
IPR/TR-422/2017 (MARCH, 2017)

Radiation Heat Transfer Studies for Dome Fabrication Project
DEEPU S. KRISHNAN, K. P. SINGH, S. S. KHIRWADKAR and VINAY MENON
IPR/TR-423/2017 (MARCH, 2017)

Investigation on Turbulent Heat Transfer in Developing Flow Regime for Counter Current Arrangement in Double Pipe Heat Exchanger (Concentric Annulus) for PbLi Liquid Metal
ARVIND KUMAR, V. MEHTA, A. K. PRAJAPATI, A. SARASWAT, S. VERMA, R. BHATTACHARYAY, V. C. CHAUDHARI, K. T. SANDEEP, A. JAISWAL and S. GUPTA

IPR/TR-424/2017 (MARCH, 2017)

Tensile Testing of Pure Tungsten Material at Elevated Temperatures using Small Specimen
ALPESH PATEL, DHAVAL MAKVANA and S. S. KHIRWADKAR

IPR/TR-425/2017 (MARCH, 2017)

Refurbishment, Testing and Experiments on Ion Removal System Magnet of SST-1 NBI
SANJEEV SHARMA, BHARGAV CHOKSI, S. RAMBABU, SANJAY PARMAR, V.
PRAHLAD and U. K. BARUAH
IPR/TR-426/2017 (MARCH, 2017)

Study of Spectral Characteristics and Operating Parameters of Twin Cavity CH₃OH Laser for
FIR Diagnostics of SST-1
ASHA ADHIYA and RAJWINDER KAUR
IPR/TR-427/2017 (MARCH, 2017)

Adsorption Test Facility for Characterizing Adsorbents at a Cryogenic Temperature Down to
4.5 k
J. MISHRA, J. AGARWAL, P. NAYAK, P. PANCHAL, S. MUKHERJEE, S.
KASTHURIENGAN and R. GANGRADEY
IPR/TR-429/2017 (APRIL, 2017)

Report on Demonstration of Different EPICS extension for control and Monitoring of Power
Supply
ARNAB DAS GUPTA, Hitesh K. GULATI, AMIT K. SRIVASTAVA, S. SUNIL and Z.
KHAN
IPR/TR-430/2017 (APRIL, 2017)

Implementation of an OROCOS based Real-Time Equipment Controller for Remote
Maintenance of Tokamaks
NAVEEN RASTOGI, PRAMIT DUTTA and KRISHAN KUMAR GOTEWAL
IPR/TR-431/2017 (MAY, 2017)

Development of Pneumatic Punch and Cutter for Extruder Type Pellet Injector Application
PARESH PANCHAL, SAMIRAN MUKHERJEE and RANJANA GANGRADEY
IPR/TR-432/2017 (MAY, 2017)

A Theoretical and Experimental Hydrodynamic Analysis of Molten PbLi for Round Liquid Jet
ARVIND KUMAR, V. C. CHAUDHARI, GAUTAM PULUGUNDLA, and SERGEY
SMOLENTSEV
IPR/TR-433/2017 (JUNE, 2017)

Design and Assessment of Horizontal Access Module (Ham) for Laser Interferometer
Gravitational-Wave Observatory (Ligo)-India Project
RAKESH KUMAR, MANOJ KUMAR GUPTA AND ZIAUDDIN KHAN
IPR/TR-434/2017 (JUNE, 2017)

Calibration of Michelson Interferometer Diagnostics and Measurements with Monochromatic Source

ABHISHEK SINHA, S. K. PATHAK, STEFAN SCHMUCK AND JOHN FESSEY

IPR/TR-435/2017 (JULY, 2017)

Advanced Fabrication Techniques and its Application in Strategic and Nuclear Domain: An Overview

GAUTAM R VADOLIA, K P SINGH, BHARAT DOSHI and MANOJ KUMAR GUPTA

IPR/TR-436/2017 (JULY, 2017)

Comparison of ANISN and ATTILA Codes Neutronics Results for a Simplified Model of US DCLL Blanket

DEEPAK AGGARWAL and CHANDAN DANANI

IPR/TR-437/2017 (JULY, 2017)

Stokes Parameters of Beam Reflected from Optically Absorbing Medium

ASHA ADHIYA, RAJWINDER KAUR and PRAMILA

IPR/TR-438/2017 (JULY, 2017)

Design and Development of 140 GHz D-Band Phase Locked Heterodyne Interferometer System for Real Time Density Measurement

UMESH NAGORA, ABHISHEK SINHA, S. K. PATHAK, PHILIP IVANOV, R. L. TANNA, K. A. JADEJA, K. M. PATEL and J. GOSH

IPR/TR-439/2017 (AUGUST, 2017)

Technical Report on Automation in calorimetric pulse power measurement of ECRH Gyrotron system

HARSHIDA PATEL, GUNJAN PATEL, SHAH MOKSHA and B. K. SHUKLA

IPR/TR-440/2017 (AUGUST, 2017)

Thermo-Mechanical Analysis for Basic Symmetric Chamber (BSC)

MANOJ KUMAR GUPTA, RAKESH KUMAR and ZIAUDDIN KHAN

IPR/TR-441/2017 (AUGUST, 2017)

Numerical Modelling for the Effective Thermal Properties of Lithium Meta-Titanate Pebble Beds

MAULIK PANCHAL and PARITOSH CHAUDHURI

IPR/TR-442/2017 (AUGUST, 2017)

USB Web Camera Based Feedback Control Technique of Aligning a Laser Beam

S. SUNIL, AMIT K SRIVASTAVA and ZIAUDDIN KHAN

IPR/TR-443/2017 (AUGUST, 2017)

Frequency Sweep Linearisation of Ka Band Microwave Source for the FMCW Reflectometer Diagnostic

JJ.U. BUCH, E. V. PRAVEENLAL and S. K. PATHAK

IPR/TR-444/2017 (AUGUST, 2017)

Indigenous MgB₂ Strands Development Activities at IPR

SUBRAT KUMAR DAS, ANEES BANO, ANANYA KUNDU, MONI BANAUDHA and SUBRATA PRADHAN

IPR/TR-445/2017 (SEPTEMBER, 2017)

Data-Acquisition & Interlock System Design for Corrosion Experiments of Indian RAFMS with Flowing Pb-Li

A. SARASWAT, S. VERMA, S. GUPTA, A. SARADA SREE and E. RAJENDRA KUMAR

IPR/TR-446/2017 (OCTOBER, 2017)

Design and Analysis of Circular Waveguide Termination for SYMPLE

JITENDRA KUMAR, ZEESHAN, RAHUL JAISWAL, ARPIT BARANWAL, RAJ SINGH and ANITHA V. P.

IPR/TR-447/2017 (OCTOBER, 2017)

3D Magneto-hydrodynamic numerical analysis for Pb-Li flow in a test mock up with electrically coupled flow channels and complex manifold

ANITA PATEL, R. BHATTACHARYAY, P. SATYAMURTHY, P. K. SWAIN and S. RANJITHKUMAR

IPR/TR-448/2017 (OCTOBER, 2017)

Transient Thermal Analysis of Cathode for High Density Multi-Filamentary Plasma Source of LVPD

PROSENJIT SANTRA, AMULYA K. SANYASI, VIVEK PATEL, NISARG RAVAL, AKASH PATEL, PINAKIN PATEL, PRAMIT DUTTA, PRABHAKAR SRIVASTAV, P. K. SRIVASTAVA, R. SUGANDHI, MANOJ K. GUPTA, BHARATI DOSHI and L. M. AWASHTI

IPR/TR-449/2017 (OCTOBER, 2017)

Jitter Minimization in Triggering Multiple Solid State Devices using Fiber Optical Cables

BHAVESH KADIA, V. S. KIRAN MEDURI, Y. S. S. SRINIVAS and S. V. KULKARNI

IPR/TR-450/2017 (NOVEMBER, 2017)

Design Aspects of Two Stub Matching Network for the Up-gradation of Aditya ICRH System for Fast Wave and Ion Bernstein Wave Heating Experiments

SUNIL KUMAR, S. V. KULKARNI and HIGH POWER ICRH SYSTEMS DIVISION

IPR/TR-451/2017 (DECEMBER, 2017)

Proposed RFID (Radio Frequency Identification) based Inventory/Asset Management Solution for IPR

MANISHA BHANDARKAR, PANKAJ SRIVASTAVA, L. M. AWASTHI, B. R. DOSHI, SANJAY PANDYA, YOGESH DADEECH, MUKESH C. JHA, R. RATHOD, KIRAN AMBULKAR, BRIJ K. SHUKLA, KUMUDINI TAHILIANI, AGRAJIT G. GAHALAUT, CHHAYA CHAVDA, DILIP C. RAVAL, VINAY KUMAR, V. PRAHLAD, FALGUNI SHAH, BKBS RAO and H. S. CHAMUNDE

IPR/TR-452/2017 (DECEMBER, 2017)

Real-time Control of Gas feed Pulses to Reduce Wall Loading of Fuel Gas in ADITYA Upgrade Tokamak

PRAVEENLAL EDAPPALA, MINSHA SHAH, RACHANA RAJPAL, K. A. JADEJA, R. L. TANNA and J. GHOSH

IPR/TR-453/2017 (DECEMBER, 2017)

Trigger and Timing Control System using FPGA and MicroBlaze Soft Processor for Plasma Operations of ADITYA-U Tokamak

MINSHA SHAH, PRAVEENLAL EDAPPALA, VISWAY RAULJI, RACHANA RAJPAL, R. L. TANNA, C. N. GUPTA and J. GHOSH

IPR/TR-454/2017 (DECEMBER, 2017)

Design and Development of TM Mode Launcher for Circular Waveguide for SYMPLER
ARPIT BARANWAL, RAHUL JAISWAL, SHREEKANT PATEL, JITENDRA KUMAR,
RAJ SINGH and ANITHA V. P.

IPR/TR-455/2018 (JANUARY, 2018)

Application of 2D Digital Image Correlation (DIC) Technique for Strain measurement during tensile test

KEDAR BHOPE, MAYUR MEHTA, JIGNESH CHAUHAN, HARDIK TAILOR and SAMIR KHIRWADKAR

IPR/TR-456/2018 (JANUARY, 2018)

Assembly and Characterization of Fourier Transform Michelson Interferometer Diagnostic

ABHISHEK SINHA, S. K. PATHAK, JOHN FESSEY and STEFAN SCHMUCK

IPR/TR-457/2018 (JANUARY, 2018)

Design and Development of Millimeter Wave Interferometer Circuit for Real-Time Measurement of Plasma Density

PRAVEEN KUMAR ATREY, DHAVAL PUJARA, SUBROTO MUKHERJEE, UMESH

NAGORA, PRAVEENLAL EDAPPALA, PRAVEENA KUMARI and RACHANA RAJPAL

IPR/TR-458/2018 (JANUARY, 2018)

Study on Interactions of Inter-Winding Capacitances of Multi-Secondary Transformer and their Effect on the Performance of PSM Based High Voltage Power Supply

L. N. GUPTA, S. V. KULKARNI, N. P. SINGH, PARESH. J. PATEL, DIPAL THAKKAR,
SUMOD C. B. and U. K. BARUAH
IPR/TR-459/2018 (JANUARY, 2018)

Thermo-Mechanical Analysis of Horizontal Access Module (HAM) Chamber
MANOJ KUMAR GUPTA, RAKESH KUMAR and ZIAUDDIN KHAN
IPR/TR-460/2018 (JANUARY, 2018)

Wireless and Wired Data Communication for High Heat Flux Test Facility (HHFTF)
KALPESH GALODIYA, SUNIL BELSARE, SAMIR KHIRWADKAR, TUSHAR PATEL
and PRAKASH MOKARIA
IPR/TR-461/2018 (JANUARY, 2018)

Determination of Mueller Matrix of a Hollow Rooftop Reflector
ASHA ADHIYA and RAJWINDER KAUR
IPR/TR-462/2018 (JANUARY, 2018)

Design Basis of First Wall Helium Cooling System for LLCB TBM
B. K. YADAV, A. GANDHI, S. RAO, P. CHAUDHURI and E. R. KUMAR
IPR/TR-463/2018 (FEBRUARY, 2018)

Development of Pump Performance Test Loop for Feasibility Study of Operation Similar to
LLCS loop for IN-LLCB TBM
MRITUNJAY KUMAR, ANKUR JAISWAL, ABHISHEK SARASWAT and R.
BHATTACHARYAY
IPR/TR-464/2018 (FEBRUARY, 2018)

Experimental plan for testing TBM FW mock-up of IPR in Helium Loop Karlsruhe
(HELOKA), at KIT, Germany
B. K. YADAV, S. RANJITH KUMAR, A. SARASWAT, S. RAO, S. GUPTA, A. N. MISTRY,
P. CHAUDHURI and E. R. KUMAR
IPR/TR-465/2018 (FEBRUARY, 2018)

NDOT-1D (v1.2): A MATLAB code for preparation & execution of MCNP input files for 1-
D radial model of fusion reactors
P. J. BHUYAN, B. J. SAIKIA and C. DANANI
IPR/TR-466/2018 (FEBRUARY, 2018)

Development of Machine Vision Acquisition System for Tokamak in Visible Spectrum
VISHNU CHAUDHARI, MANOJ KUMAR and AJAI KUMAR
IPR/TR-467/2018 (FEBRUARY, 2018)

A Code for Magnetic Field Due to Arbitrary Electromagnets (CAE v1.0)
DIVYANG R. PRAJAPATI and GATTU RAMESH BABU

IPR/TR-468/2018 (FEBRUARY, 2018)

Implementation of PLC Based Quench Fault Monitoring and Control Mechanism for TFPS
AKHILESH KUMAR SINGH, DINESH KUMAR SHARMA, MURTUZA M. VORA, AMIT
OJHA and SUPRIYA A. NAIR

IPR/TR-469/2018 (MARCH, 2018)

Heat treatment and Metallurgical Characterization of Nb₃Sn/Cu KODA Strands
YOGENDRA SINGH, PIYUSH RAJ, ARUN PANCHAL, CHIRAG DODIYA, SUBRAT
KUMAR DAS, NITISH KUMAR, ANEES BANO, ANANYA KUNDU, BHADRESH
PARGHI, DHAVAL BHAVSAR, DEVEN KANABAR, AZAD MAKWANA, MAHESH
GHATE and UPENDRA PRASAD

IPR/TR-470/2018 (MARCH, 2018)