

TECHNICAL REPORTS (TR) 2013-14

Resin Cast Multisecundary 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 SYMPLE

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 SYMPLE 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 SYMPLE

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)