

IPR Technical Reports 2026

Access to Full-Text Report is available only on the Intranet Server.
Access Code: **TR@ipr2026** (case sensitive)

A Comparative Study of HPC Container Technologies: Docker, Singularity, and HPC Container Maker (HPCCM)

SHIVAM PATEL, PRASHANT KUMAR and HEMANT JOSHI

IPR/TR-947/2026 (May 2026)

Embedded Peripheral Trigger Control System (EPTCS) for Ramping Helmholtz Coil and Exciter Firing - Wave Plasma Interaction Experiment in Large Volume Plasma Device - Upgrade

P. K. SRIVASTAVA, DEEPAK RAJPUROHIT, A. K. SANYASI and AYAN ADHIKARI

IPR/TR-946/2026 (May 2026)

Development of Langmuir Probe Electronics: Past Architectures to Current Implementation

PRAMILA GAUTAM, SAURAV KUMAR, SUMAN DOLUI, KAUSHLENDER SINGH, SK. INZAMUL HAQUE, RACHANA RAJPAL, RAKESH TANNA and JOYDEEP GHOSH

IPR/TR-945/2026 (May 2026)

Preliminary Study of Dissimilar Welding of IN-RAFM and SS316L Steels Using Handheld Laser Technology

AKHIL KHAJURIA, CHANDRA SEKHAR SASMAL, PARITOSH CHAUDHURI, HARDIK TAILOR and VISHVESH BADHEKA

IPR/TR-944/2026 (May 2026)

Preliminary Results of FPGA-Based Frame Grabber Software Stack for LWIR Camera Development

SHUBHAM JOSHI, PRAVEENLAL EDAPPALA, HITESH MANDALIYA, ABHIJEET KUMAR, RACHANA RAJPAL, SHWETANG PANDYA and JOYDEEP GHOSH

IPR/TR-943/2026 (May 2026)

Beam Campaign Report 01/September - October/2025

DIPALKUMAR P. THAKKAR, KARISHMA QURESHI, LAXMI NARAYAN GUPTA, LAXMI KANT BANSAL, PRIYANKA KUMARI, PURVKUMAR B. HANSPURA, SUMOD C. B., SURENDRA VANAPALLI, VIJAY VADHER, V. PRAHLAD and UJJWAL BARUAH

IPR/TR-942/2026 (April 2026)

High-Availability PostgreSQL Cluster for Experimental Data Systems

PREM KUMAR and KIRTI MAHAJAN

IPR/TR-941/2026 (April 2026)

Feasibility Study of Lithium Metatitanate Pebble Fabrication Using the Graphite Bed Process

MAULIK PANCHAL, AROH SHRIVASTAVA, SWAPNIL LONARE, DEEPAK SHARMA, HARSH PATEL, VILAS CHAUDHARI and PARITOSH CHAUDHURI

IPR/TR-940/2026 (April 2026)

Steady-State Thermal Performance of Microporous Insulation Wrapped on a Heated Pipe: Experimental Investigation

MAULIK PANCHAL, SANDEEP GUPTA, HARSH PATEL, DIGVIJAY, ANKIT GANDHI, VILAS CHAUDHARI and PARITOSH CHAUDHURI

IPR/TR-939/2026 (April 2026)

Process and Safety Design Manual for Experimental Helium Cooling Loop (EHCL)

ANKIT GANDHI, DEEPAK SHARMA, ARVIND KUMAR, RAUNAK RATHORE, YASH MISTRY, DIGVIJAY, RAGINI TRIPATHI and PARITOSH CHAUDHURI

IPR/TR-938/2026 (April 2026)

Simulation Framework for Collision- and Shadowing-Free Multi-Probe Motion Planning for IMPED

MANISHA BHANDARKAR, ROSH ROY, TANMAY KARMAKAR, JIGNESH PATEL, KALPESH DOSHI, PRABAL CHATTOPADHYAY and KIRTI MAHAJAN

IPR/TR-937/2026 (April 2026)

RF Noise Interference in Helicon Plasma Thruster Diagnostic Sensors Measurements: Problems and Solutions

NARENDER SINGH, RAMESH KUMAR BUDDU, PRASHANT KUMAR, RENU BAHL, MRITUNJAY KUMAR, KALPESH DOSHI and P. K. CHATTOPADHYAY

IPR/TR-936/2026 (April 2026)

Design and Development of Ramp Voltage Circuit for Langmuir Probe Diagnostic in Multi-Cusp Plasma Device (MPD)

ZUBIN SHAIKH, KARISHMA QURESHI, SANJAY PARMAR, SURENDRA VANAPALLI, PRIYANKA KUMARI, PURV HANSAPURA, P. K. CHATTOPADHYAY and N. RAMASUBRAMANIAN

IPR/TR-935/2026 (April 2026)

Prototype Implementation of an On-premise Retrieval-Augmented Generation (RAG) Based Conversational AI System for Administrative Assistance

VIJAY PATEL, NAYAN MODI, SHARAD JASH and ARVIND SINGH

IPR/TR-934/2026 (April 2026)