The 4th State

Newsletter of the Institute for Plasma Research, Gandhinagar, Gujarat (India)

Issue 151, February 2026

77th Republic Day 2026 celebration at IPR

The 77th Republic Day was celebrated at the IPR main campus on 26 Jan 2026 with full enthusiasm and patriotism. On this occasion, IPR Director, Dr. Tapas Ganguli unfurled the National Flag. Director addressed the gathering of staff members and their families present for the event of Republic Day celebration at IPR. In his speech, he highlighted the first plasma operation on 11 December 2025 in the indigenously built India's first Small-Scale Spherical Tokamak (SSST) at IPR, along with notable achievements in other two Tokamaks: Aditya-U and SST-1. He focused on many other recent scientific and technological achievements from various divisions of IPR, ITER-India, FCIPT and CPP-IPR.

He also mentioned about successful organization of 41st DAE Safety & Occupational Health Professionals Meet-2025 jointly by IPR and AERB during 17-19 Dec 2025.

Director, Dr. Tapas Ganguli unfurling the National Flag (L), addressing the staff and their families (Bottom R)

77th Republic Day 2026 celebrated at CPP-IPR

Republic Day was celebrated at the CPP-IPR campus, Guwahati. Centre Director, Dr. Smruti Ranjan Mohanty unfurled the National Flag. He then addressed the gathering of CPP-IPR staff and their families. He briefed on the achievements of the centre.

Centre Director, Dr. Smurti Ranjan Mohanty unfurling the National Flag (L) and addressing the staff and their families (R)

SST-1 Campaign

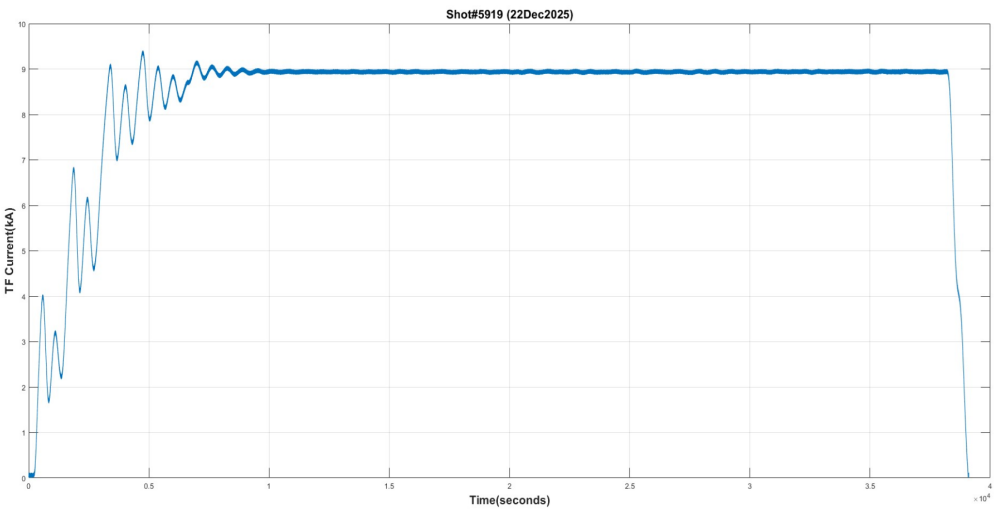
In SST-1, 5 nos. of Cryostat ports (pumping and instrumentation) were upgraded with LN_2 cooled thermal shield for reducing the radiation heat load on magnet system. Insulation resistance of all magnet coils and PF3 coils successfully tested for 2 kV, which provided the opportunity to increase the Ohmic discharge current up to 10 kA. Cryo-plant components were also repaired and validated for its performance. After these upgradation, SST-1 cooldown operation started in December - 2025 and following are the major achievements:

i) First ever charging of superconducting Toroidal field magnetic coil up to 3 Tesla magnetic field as per rated design and repeatedly charged first time above 2.8 Tesla magnetic field as per rated operation parameter for long durations (>9 Hrs) to prove its reliability to have 1000 Second plasma operation

ii) First ever charging of superconducting poloidal field magnetic coil up to 1 kA current for long duration as per rated power supply to validate shaped plasma operation

iii) Validation of Cryostat and Vacuum Vessel and achieved the required ultra high vacuum as required for plasma operations

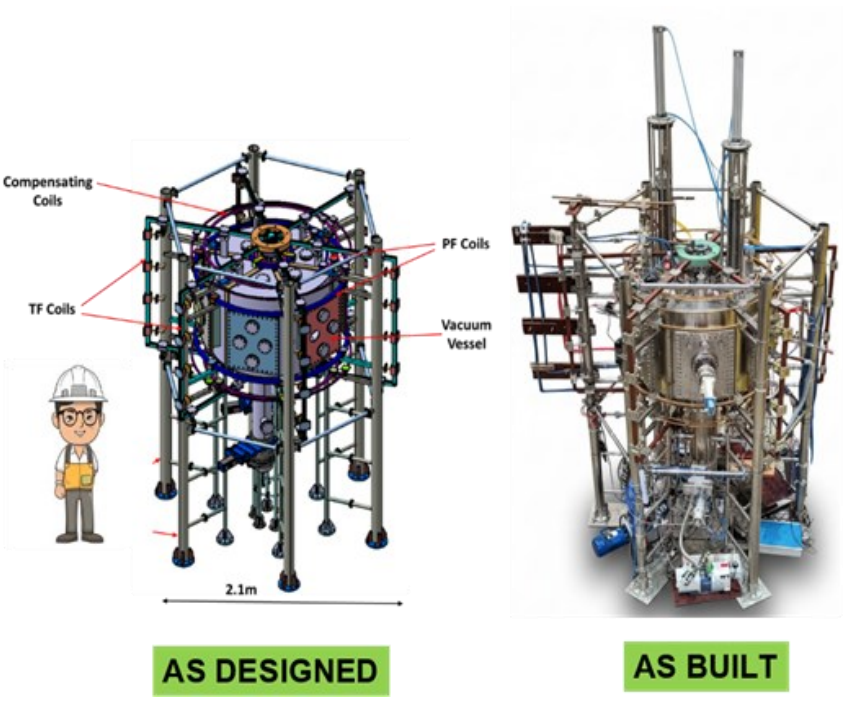
iv) First ever charging and operation of ohmic transformer with 10kA current for plasma operation and it has validated completeness of insulation resistance of all magnetic coil for reliable operation



The figure showing charging of TF coil at ~9kA for 9 hours

First Plasma Experiments in Small Scale Spherical Tokamak (SS-ST)

IPR has commissioned India's first Small-Scale Spherical Tokamak (SS-ST, prefix SS is for Small Scale). With SS-ST, now IPR has three working tokamaks. A spherical tokamak is a compact fusion machine with its horizontal dimension considerably smaller than similar sized conventional tokamaks. Even with small size it can hold very hot plasma efficiently. It can work well with less powerful magnets, which makes it easier and potentially cheaper to build. However, its integration is difficult due to limited space for central column and requirement of tight mechanical tolerances for the sub-assemblies. At IPR, SS-ST was developed for understanding the challenges associated with manufacturing of its components & their assembly and investigate physics of tokamak plasma in this special configuration. All the components of SS-ST have been designed and developed indigenously, fabricated with the help of domestic industries. After completion of assembly and testing of the subsystems, first plasma experiments were conducted on 11th December, 2025. During the campaign, base pressure below 2 × 10^{-7} mbar was achieved in the vacuum vessel. All the subsystems, including the hydrogen gas feed system, magnetic coil power supplies, 2.45 GHz electron cyclotron resonance (ECR) system, machine diagnostics, front-end electronics, and central triggering and ST Control System (STCS), were independently tested for performance and operational reliability. The STCS operated in pre-programmed mode, injecting 99.999% pure hydrogen gas into the vessel followed by sequential application of magnetic field coil currents. Plasma was successfully produced on the first ever attempt. High-speed visible imaging captured the plasma formation, showing filament structures aligned with the toroidal magnetic field. All diagnostic signals performed as expected, confirming plasma breakdown and the presence of excited impurity lines. Detailed analysis of the data is ongoing. A photograph of the first plasma is shown below.



A CAD model view and as built Spherical Tokamak as it is commissioned at IPR. For providing the reference of the size, a doodle of human size is provided

Staff members witnessing the first plasma shot from the viewing gallery (L). A view of the control room (R)

Data visualization during the plasma shot at the control room

Image of the first plasma as captured by a Fast camera

IPR's participations in 2nd DAE Conclave

The 2nd DAE Conclave was organised by TIFR during 14-18 January 2026, brought together over 1,000 delegates, including scientists, technologists, researchers, scholars and leaders from across all Units and Institutions of DAE on a common platform for knowledge sharing and collaboration. The theme of the conclave was **'Creating Innovative Solutions for a Sustainable Future through Nuclear Horizons'** underscores India's comprehensive nuclear ecosystem and its expanding role in addressing national priorities across power and non-power applications of nuclear energy.

IPR actively participated in the Conclave, presenting its cutting-edge research and developmental activities through five posters, highlighting its contributions to advancing plasma science and technology. Additionally, many models on fusion technologies were also presented by the IPR Outreach Division, further enhancing the interactive experience at the event. Dean R&D, IPR, has delivered a comprehensive talk, on "**R&D activities on Fusion Technologies at IPR**".

The Conclave's wide spectrum of special talks, panel discussions, poster sessions and exhibitions complemented by laboratory visits, art and garden tours, and cultural programmes, reflecting DAE's holistic approach to science, technology and society.

IPR GC Chairman, Dr. A. K. Mohanty delivering his address. Dean R&D, Dr. P Chaudhuri delivering his talk (C). IPR Director, Dr. Tapas Ganguli being felicitated during the conclave

Shri Anil Bhardwaj (L) and Dr. Joydeep Ghosh presenting their posters

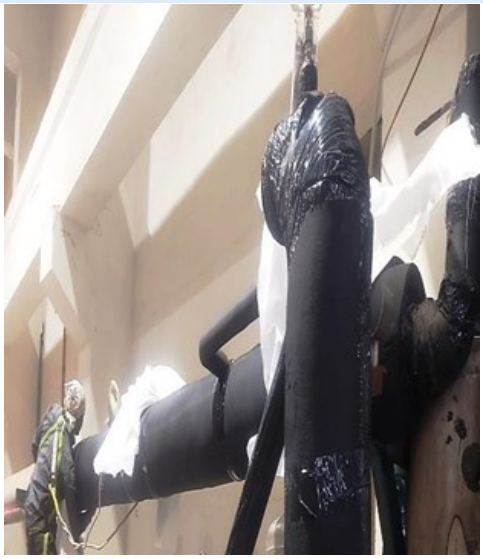
IPR GC Chairman visiting the IPR exhibits

IPR ORD Team with IPR Governing Council Chairman, Dr. A.K.Mohanty (Secretary, DAE and Chairman, AEC) (4th from Left)

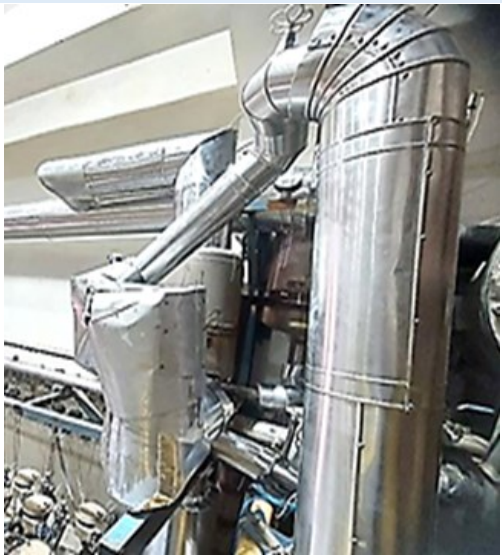
Repairing and thermal Insulation on 80 K main vent line of LN2 distribution system SST-1

During in past operation of the SST-1 experiment, ice build-up and LN2 fluid leakage were detected in the main LN2 vent of the 80 K distribution system. This prompted the need for preventive action to safeguard personnel and protect equipment. The insulation material had deteriorated due to aging and required replacement to restore proper operational efficiency. To reduce heat transfer and preserve the cryogen, Nitrile Rubber, a cryogenic 'O' grade thermal insulation material, was applied to the 80 K vent line. Leaking manual hand valves and non-return valves were removed from the 80 K distribution hydraulics. A specialized installation technique was employed to prevent air from entering the insulation, using high-density polyethylene fiber cloth bonded with moisture-resistant foil film as a vapour barrier between each insulation layer. Thermal performance validation of the insulation was carried out during the SST-1 campaign, with no leaks observed. The complex task of installing the insulation in a congested piping network at a height of 12 meters was completed successfully, with all necessary safety precautions and equipment in place.

LN2 leakage in main vent line



Thermal insulation installation process



No leakage after thermal insulation during SST-1 operation

Nuclear Radiological Emergencies — IPR at two-day Capacity Building Programme

The Crisis Management Group (CMG), DAE, in collaboration with the Gujarat Institute of Disaster Management - GIDM, organized a two-day Capacity Building Programme on the Management of Nuclear & Radiological Emergencies NRE on 20–21 January 2026 at GIDM, Gandhinagar.

The programme featured expert lectures from DAE, BARC and IPR, hands-on training and table-top exercises aimed at strengthening operational preparedness, inter-agency coordination and response confidence among first responders. The training covered radiation fundamentals and safety, regulatory and legal frameworks, roles and responsibilities of first responders, medical management of radiation emergencies, hands-on familiarization with radiation monitoring equipment, and exercises on potential NRE scenarios. Officials from the Gujarat State Revenue Department, Police, Fire, SDRF and District Medical Services participated in the programme. Sessions on the role of DAE in NRE management, societal applications of radiation technologies, and myths and facts related to radiation were particularly well received by the participants.

Dr. Sudhirsinh Vala giving a talk on radiation safety

IPR RERC demonstrated various radiation detectors and instruments

Execution of Memorandum of Understanding between IPR & IITRAM

Institute for Plasma Research (IPR) and Institute of Infrastructure Technology, Research and Management (IITRAM), Ahmedabad have formalized a strategic partnership with the signing of a Memorandum of Understanding (MoU) on 21st January, 2026 to promote collaborative research and academic engagement in plasma science and allied fields. The MoU marks an important step toward strengthening joint efforts in research and development, innovation, and human resource development.

The partnership aims to harness the combined expertise and infrastructure of both organizations to accelerate the advancement and societal deployment of plasma technologies. It also places strong emphasis on skill development and capacity building to nurture a future-ready workforce. This collaboration is expected to create new opportunities for high-impact research, technology translation, and meaningful contributions to academic excellence and societal progress.

The execution ceremony was held at IPR, in the presence of Dr. Tapas Ganguli, Director, IPR, Prof. Pramod Kumar Jain, Director General, IITRAM and the team from both the institutions.

Dr. Tapas Ganguli, Director, IPR (R) and Prof. Pramod Kumar Jain, Director General, IITRAM (L) signing the MoU

Teams from IPR and IITRAM during the execution of MoU

Achievement

Prof Sudip Sengupta, Senior Professor at IPR has been elected as a Fellow of the Indian Academy of Sciences (IAS), Benguluru during 2025 (effective 01 Jan 2026).

View the List of IAS Fellows elected during 2025 https://www.ias.ac.in/application/Fellows_2025.pdf

Many Congratulations!!

Colloquium at IPR

Colloquium #347 was organized on 05 Jan 2026 at IPR. The colloquium talk was delivered by **Dr. P. N. Maya**, IRFM, CEA-Cadarache, France . Title of the colloquium talk was "**Current Wisdom and Extrapolation of Data for Tokamak-Based Fusion Electricity** "

Read the abstract: https://www.ipr.res.in/documents/colloquium347.html

Dr. P. N. Maya

Colloquium #348 was organized on 09 January 2026 at IPR. The colloquium talk was delivered by **Dr. Animesh Kuley**, Department of Physics, IISc Bangalore. Title of the colloquium talk was "**Turbulence Control and Reactor-Relevant Confinement in Modern Stellarators**"

Read the abstract: https://www.ipr.res.in/documents/colloquium348.html

Dr. Animesh Kuley

Colloquium #349 was organized on 23 January 2026 at IPR. The colloquium talk was delivered by **Prof. Tarak Nath Dey**, Department of Physics, IIT-Guwahati, Guwahati. Title of the colloquium talk was "**Coherent Control of Big Quantum Systems: A New Era in Physics**"

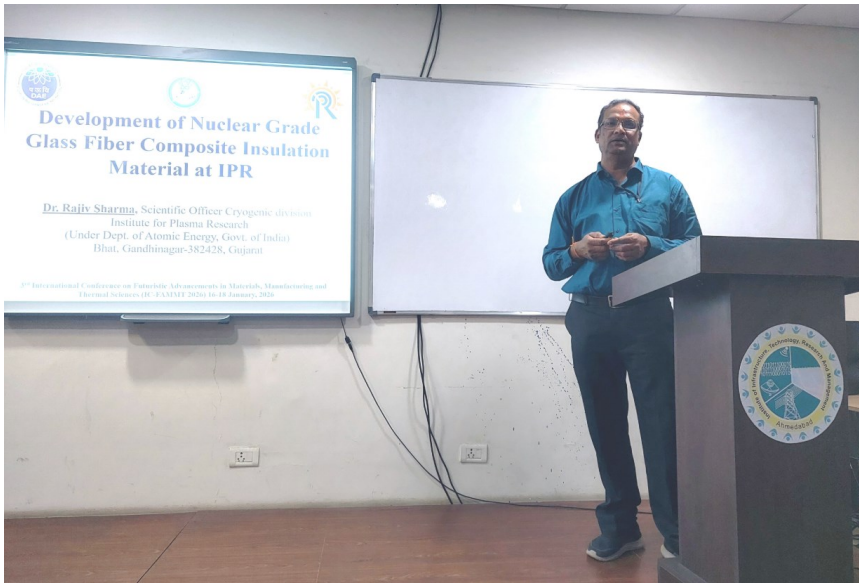
Read the abstract: https://www.ipr.res.in/documents/colloquium349.html

Prof. Tarak Nath Dey

Conference Presentation

Dr. Rajiv Sharma gave an invited talk on the topic "**Development of nuclear grade glass fiber composite insulation material at IPR**" at the 3rd International Conference on Futuristic Advancements in Materials, Manufacturing and Thermal Sciences (IC-FAMMT-2026) during January 16-18, 2026 at IITRAM, Ahmedabad organized by Department of Mechanical and Aerospace Engineering in Association with Mechanical and Industrial Engineering Department, IIT Roorkee, NIT Uttarakhand and SSME, SAC-ISRO, Ahmedabad.

He also chaired a Technical Session on "**Smart Manufacturing Technologies**" at the same conference.



Dr. Rajiv Sharma delivering his talk (L), Being Felicitated (R)

Past Events @ IPR

- ***Dr. Sarveshwar Sharma,*** gave a talk on “Plasma Dynamics in VHF Capacitive Discharges Operated in the Kilovolt-Regime at Sub-Millitorr Pressures” at 67th Annual Meeting of the APS Division of Plasma Physics, California, USA, 17-21 November 2025
- ***Dr. Ramesh Joshi,*** gave a talk on "Integration of MODBUS-RTU Monitoring with EPICS for Offline Impedance Matching in ICRH Systems" at IEEE Recent Advances in Intelligent Computational Systems (RAICS), Kochi, Kerala, 20 -23 November 2025
- ***Mr. Kirankumar Ambulkar,*** gave a talk on "Development of WR284 Waveguide Coupler and High Power Testing" at National Conference on Emerging Trends in Vacuum Electronic Devices and Applications (VEDA-2025), Bengaluru, 3-5 December 2025
- ***Ms. Savita Pannu,*** gave a talk on "Tailoring Morphological and Magnetic Properties of Iron Oxide Nanoparticles prepared via Thermal Plasma under Applied Magnetic Field" at 3-day International Conference on Material Science (3d-ICOMAS), Verona, Italy, 3-5 December 2025
- ***Talks presented at IEEE Microwave, Antennas and Propagation Conference, Kochi, Kerala, 14-18 December 2025***
  - ***Mr. Abhishek Sinha,*** gave a talk on "Broadband Emissivity Analysis of Black Body Target Materials for Calibration of Michelson Interferometer Diagnostic"
  - ***Mr. Nitesh Kataria,*** gave a talk on "Development of Water-Cooled Half Helix Antenna for Ion Cyclotron Resonance Heating (ICRH) in Plasma Thruster Experiments"
- ***Talks presented at 41st DAE Safety & Occupational Health Professional Meet (DAE-SOHPM), Institute For Plasma Research (IPR), Gandhinagar, 17-19 December 2025***
  - ***Ms. Manika Sharma,*** gave an invited talk on "DeepCXR : Augmenting AI for Automated Health Screening in India"
  - ***Mr. Sunil Belsare,*** gave a talk on "Ensuring Safety and Reliability in Integrating the Experimental Helium Cooling Loop with the High Heat Flux Test Facility at IPR"
  - ***Ms. Kirti Mahajan,*** gave a talk on "Role of Digital Safety System Management and Mobile Application in Enhancing Industrial Safety"
- ***Dr. Mainak Bandyopadhyay,*** gave an invited talk on "Negative Ion Source Plasma & its Extracted Beam: Research Activities & Opportunities at IPR" at 40th PSSI National Symposium on Plasma Science & Technology for Sustainable Future (PLASMA 2025), Indian Institute of Technology, Tirupati, 27-29 December 2025
- ***Dr. Anupama Oza,*** Sardar Vallabhbhai National Institute of Technology (SVNIT), Surat, gave a talk on "Investigation of Surface Microwave-Sustained Plasma in the Presence of Dielectric Beads and Magnetic Field" on 02nd January 2026
- ***Dr. Rajwinder Kaur Sengupta,*** ITER Organization, France, gave a talk on "Overview of the Density Interferometer Polarimeter Diagnostic System for ITER" on 02nd January 2026
- ***Dr. P. N. Maya,*** IRFM, CEA-Cadarache, France, gave a talk on "Current Wisdom and Extrapolation of Data for Tokamak -Based Fusion Electricity" on 5th January 2026 (***Colloquium #347***)
- ***Dr. Vibhutiben R. Vashi,*** gave a talk on "Cross section measurements for Strontium isotopes using D-T neutrons with Covariance analysis and time of flight experiment for neutron energy measurement" on 6th January 2026
- ***Dr. Prince Kumar,*** gave a talk on "Precursor and Pinned Solitons in Strongly Coupled Yukawa Fluids" on 06th January 2026
- ***Mr. Kaushlender Singh,*** gave a talk on "Effect of plasma-driven magnetohydrodynamic activity and pulsed gas-injection on edge plasma turbulence in ADITYA-U tokamak" on 08th January 2026
- ***Dr. Indranil Bandyopadhyay,*** gave a talk on "SST-Bharat as a stepping stone to Indian Fusion DEMO" on 08th January 2026
- ***Dr. Animesh Kuley,*** Department of Physics, IISc Bangalore, gave a talk on "Turbulence Control and Reactor-Relevant Confinement in Modern Stellarators" on 9th January 2026 (***Colloquium #348***)

Past Events @ IPR

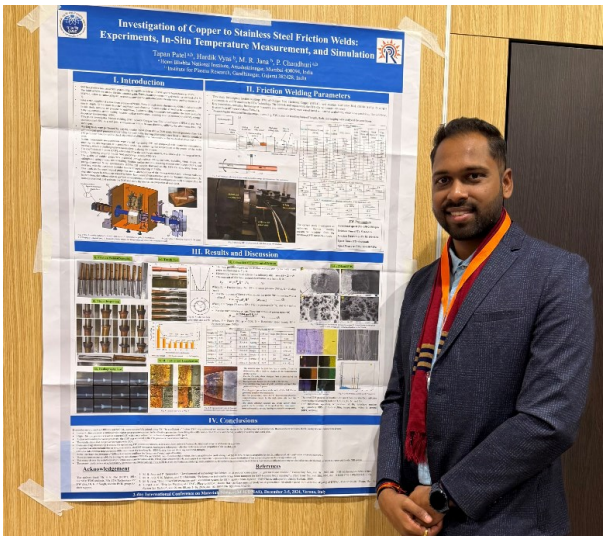
- ***Dr. Meghna Raviraj Karkera,*** Manipal Academy of Higher Education (MAHE), Manipal, gave a talk on "Measurement and evaluation of nuclear data with detailed covariance analysis" on 9th January 2026
- ***Dr. Rajiv Sharma,*** gave an invited talk on "Development of nuclear grade glass fiber composite insulation material at IPR" at 3rd International Conference on Futuristic Advancements in Materials, Manufacturing and Thermal Sciences (ICFAMMT 2026), Institute of Infrastructure, Technology, Research, and Management (IITRAM), Ahmedabad, 16-18 January 2026
- ***Dr. Kajal Shah,*** Princeton Plasma Physics Laboratory, Princeton, New Jersey, gave a talk on "Investigating radiated-power asymmetries in low aspect ratio fusion plasmas" on 19th January 2026
- ***Dr. Kousik Makur,*** gave a talk on "Ultra-intense Laser-Matter Interaction: Enhanced Gamma-Photon Generation and Pair Production via Quantum Electrodynamics Effects" on 20th January 2026

Upcoming Events

- LIBRTI Conference on Breeder Blanket Technology, Culham, Oxfordshire, Great Britain, 3 February 2026; https://www.ukaea.org/event/librti-conference-on-breeder-blanket-technology/
- European Institute for the PCB Community (EIPC) Winter Conference, Marseille, France, 3-4 February 2026; https://eipc.org/events_eipc/winter-conference-february-2026/
- Binding Energy: International Conference on Nuclear Technologies, Aachen, Germany, 3-5 February 2026; https://binding.energy/
- IETE West Zone Seminar and ISF Congress on the theme “Trends and Innovations in Aerospace Electronics”, Adani University, Ahmedabad, 7th February 2026, followed by a technical workshop on "Space Technology vis-a-vis Viksit Bharat" at Bhaskaracharya National Institute for Space Applications and Geo-informatics, (BISAG-N), Gandhinagar, 8th February 2026; https://docs.google.com/forms/d/e/1FAIpQLSeYJnI_uV9A66kDtUCuuioBTNJf3x6ojjkGK-IOrpQn8xqPEA/viewform
- ESAS International School on Applied Superconductivity, Bertinoro, Italy, 8-13 February 2026; https://sasevents.eventsair.com/esasinternationalschool
- 12th DAE–BRNS Biennial Symposium on Emerging Trends in Separation Science and Technology (SESTEC–2026), IGCAR, Kalpakkam, 11-14 February 2026; https://www.barc.gov.in/symposium/sestec2026.pdf
- National Conference on Environmental Radon and Its Applications (EnvRad-2026), DAE Convention Center, Anushaktinagar, Mumbai, 13-14 February 2026; https://www.barc.gov.in/symposium/envrad2026.pdf
- International Conference-cum-Round Table on Translational Research and Innovation in Beam Technologies (ICTRIBT-2026), Central University of Himachal Pradesh, Dharmshala, 13-15 February 2026; https://indico.global/event/16323/

Conference Presentation Award

Mr. Tapan Patel, gave a poster presentation on “Investigation of Copper to Stainless Steel Friction Welds: Experiments, In-Situ Temperature Measurement, and Simulation” at 3-day International Conference on Material Science (3d-ICOMAS), Verona, Italy, 3-5 December 2025, and received **Best Poster Award.**



Dr. Tapan Patel presenting his poster (L), Receiving the award (R)

Conference Presentation Award

Ms. Mahima Agarwal, gave a poster presentation on "Optimization and Characterization of Coaxial Plasma Gun in Appel Device" at 40th PSSI National Symposium on Plasma Science & Technology for Sustainable Future (PLASMA 2025), Indian Institute of Technology, Tirupati, 27 -29 December 2025, and received **Z.H. Sholapurwala Award.**

Ms. Mahima Agarwal receiving the Z. H. Sholapurwala award

IPR Administration

Accounts Section

L to R: Mr. Munaf Hanif, Mr. Nilaykumar M. Adhvaryu, Ms. S.S. Bhesania, Ms. Falguni Shah (Head), Mr. Vipul Kumar Datania, Mr. Akhil V Ajithkumar, Mr. Pinakine N Devluk

Stores Section

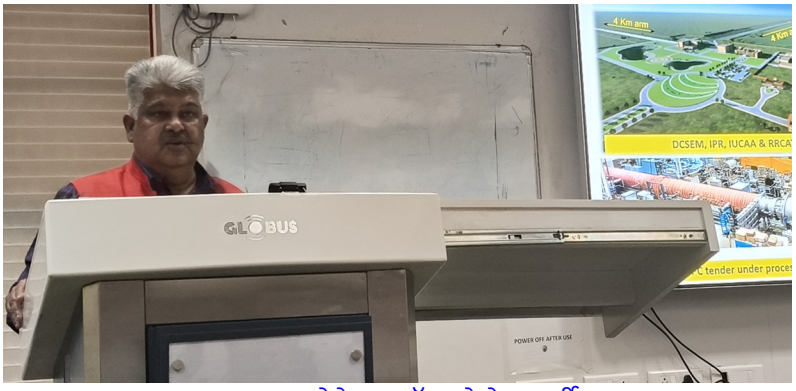
L to R: Mr. Dixit Kumar Faneja, Mr. Rajnikant Amaliar, Mr. Apurva M Kothari, Mr. Yogesh Dadheech (Head), Mr. Mohmadparvez A. Mir, Mr. Gaurav Bhatt

हिंदी व्याख्यान - डॉ. सुब्रोतो मुखर्जी

डॉ. सुब्रोतो मुखर्जी, डीन प्रशासन 31 दिसबर, 2025 को सेवा निवृत्त हुए। उनके सेवाकाल के अनुभवों को साझा करने के उद्देश्य से हिंदी अनुभाग द्वारा दिनांक 08 दिसंबर 2025 को एक व्याख्यान का आयोजन किया गया था। उन्होंने *"आईपीआर में मेरी यात्रा; आसनसोल (पश्चिम बंगाल) से गांधीनगर (गुजरात) तक और उससे आगे"* शीर्षक पर अत्यंत प्रेरक हिंदी व्याख्यान प्रस्तुत किया।

अपने उद्बोधन में उन्होंने प्लाज़्मा अनुसंधान संस्थान में अपने विस्तृत अनुसंधान, FCIPT में निभाई गई महत्त्वपूर्ण भूमिकाओं तथा एक पीएचडी *मार्गदर्शक* के रूप में प्राप्त अनुभवों को विस्तार से साझा किया। उन्होंने पावर पॉइंट के माध्यम से उन विविध शोध परियोजनाओं का विवरण दिया, जिनमें वे प्रत्यक्ष या परोक्ष रूप से सम्मिलित रहे। इन परियोजनाओं में उनकी तकनीकी दक्षता, नेतृत्व तथा वैज्ञानिक निष्पादन शैली स्पष्ट रूप से परिलक्षित हुई। डॉ. मुखर्जी ने शोध-छात्रों का मार्गदर्शन करते समय आने वाली चुनौतियों, विभिन्न अनुसंधान समस्याओं के समाधान के तरीके तथा वैज्ञानिक सोच विकसित करने की प्रक्रिया पर भी महत्वपूर्ण विचार रखे। उन्होंने नव-नियुक्त शोधकर्मियों को कठिन अनुसंधान कार्यों से निपटने हेतु उपयोगी सुझाव दिए—विशेष रूप से धैर्य, सतत अध्ययन, प्रयोगात्मक अनुशासन एवं टीमवर्क के महत्व पर बल दिया। वक्तव्य के दौरान उन्होंने अपने निजी रुचि और शौक का भी उल्लेख किया, जिनसे उन्हें ऊर्जा और प्रेरणा मिलती है। अंत में उन्होंने अपने उन मार्गदर्शकों और वरिष्ठ वैज्ञानिकों का आभार व्यक्त किया, जिन्होंने उनके पूरे शोध-जीवन में दिशा प्रदान की और चुनौतियों का सामना करने की क्षमता विकसित की।

डॉ. सुब्रोतो मुखर्जी द्वारा सरल हिन्दी भाषा में प्रस्तुत यह व्याख्यान संस्थान के स्टाफ सदस्यों के लिए सूचनाप्रद, प्रेरणादायी एवं शोध-केंद्रित रहा और उपस्थित सभी वैज्ञानिकों तथा शोधार्थियों ने इससे लाभ प्राप्त किया।



व्याख्यान देते हुए डॉ. सुब्रोतो मुखर्जी

निदेशक महोदय डॉ. सुब्रोतो मुखर्जी को स्मृति चिन्ह भेंट करते हुए

हिंदी व्याख्यान - डॉ. राज सिंह

संस्थान की स्थापना को लगभग 39 वर्ष हो चुके हैं। विगत दो वर्षों से कई वरिष्ठ अधिकारी सेवा निवृत्त हो रहे हैं, जिन्होंने 30 से 35 वर्षों तक संस्थान को अपनी सेवाएँ प्रदान की हैं। उनके अनुभव और ज्ञान आने वाली पीढ़ी के लिए प्रेरणास्रोत बने। इस उद्देश्य को ध्यान में रखते हुए डॉ. राज सिंह जी ने हिंदी व्याख्यान श्रृंखला की शुरुआत की, ताकि सेवा निवृत्त होने वाले अधिकारी अपने अनुभव सभी के साथ साझा कर सकें। इस व्याख्यान श्रृंखला के प्रणेता डॉ. राज सिंह 31 दिसंबर 2025 को सेवा निवृत्त हुए। इस उपलक्ष्य में दिनांक 22 दिसंबर 2025 को "आई.पी.आर. में मेरी यात्रा" शीर्षक पर आयोजित व्याख्यान में डॉ. राज सिंह ने अपने कार्यकाल के अनुभव साझा कर सभी को प्रेरित किया।

व्याख्यान की शुरुआत में डॉ. राज सिंह ने आई.पी.आर. में अपने प्रारंभिक कार्यकाल की स्मृतियों को साझा करते हुए अपने तकनीकी कार्यों का उल्लेख किया। उन्होंने आरएफ एम्प्लीफायर, ट्रांसमिशन लाइन, एंटीना एवं कपलिंग सिस्टम, आईसीआरएच तथा एसएसटी-1 से संबंधित हाई-पावर आरएफ एवं ग्लो डिस्चार्ज क्लीनिंग परियोजनाओं में किए गए महत्वपूर्ण कार्यों का विस्तृत विवरण प्रस्तुत किया। उन्होंने राष्ट्रीय एवं अंतर-संस्थागत परियोजनाओं में डिजाइन रिव्यू समितियों के सदस्य के रूप में अपनी भूमिका तथा तकनीकी दस्तावेजीकरण, सुरक्षा, विश्वसनीयता और सिस्टम इंटीग्रेशन से संबंधित अनुभव साझा किए।

इसके अतिरिक्त, उन्होंने संस्थान में नव-नियुक्त युवा कर्मचारियों को समय का सदुपयोग करने का संदेश दिया। उन्होंने कार्यालयीन दायित्वों को पूर्ण निष्ठा, ईमानदारी एवं समर्पण के साथ निभाने से संबंधित अनेक प्रेरक उदाहरण प्रस्तुत किए। साथ ही, उन्होंने प्रकृति के प्रति अपने प्रेम का उल्लेख करते हुए बताया कि आई.पी.आर. परिसर में पिछले 15 वर्षों में उन्होंने अनेक पौधे लगाए। उन्होंने यह संदेश दिया कि जब तक शरीर कार्य करने में सक्षम है, तब तक व्यक्ति को सक्रिय रूप से कार्य करते रहना चाहिए।

उन्होंने विगत 15 वर्षों से राजभाषा कार्यान्वयन समिति के सह-अध्यक्ष के रूप में सक्रिय एवं प्रभावी भूमिका निभाई है। उनके मार्गदर्शन और सतत प्रयासों के परिणामस्वरूप हमारा संस्थान उत्कृष्ट राजभाषा कार्यान्वयन के लिए परमाणु ऊर्जा विभाग तथा नगर राजभाषा कार्यान्वयन समिति, गांधीनगर द्वारा अनेक अवसरों पर पुरस्कृत किया जा चुका है।

व्याख्यान देते हुए डॉ. राज सिंह

डॉ. सुदीपसेन गुप्ता से स्मृति चिन्ह प्राप्त करते हुए

सीपीपी-आईपीआर में राजभाषा कार्यान्वयन संबंधित निरीक्षण एवं हिंदी व्याख्यान का आयोजन

संस्थान की राजभाषा निरीक्षण समिति द्वारा प्लाज़्मा भौतिकी केंद्र-प्लाज़्मा अनुसंधान संस्थान (सीपीपी-आईपीआर) गुवाहाटी का राजभाषा कार्यान्वयन संबंधी निरीक्षण दिनांक 20 नवंबर 2025 को किया गया। निरीक्षण समिति में शामिल सदस्य डॉ. राज सिंह, सह अध्यक्ष, रा.भा.का.स एवं डॉ. संध्या दवे, हिंदी अधिकारी ने राजभाषा कार्यान्वयन निरीक्षण के साथ सीपीपी-आईपीआर की ओलिक बैठक में सहभागिता की। निरीक्षण के पश्चात् सीपीपी-आईपीआर के सेमिनार हॉल में डॉ. राज सिंह ने ''फ्यूजन ऊर्जा: विश्व परिदृश्य और भारत'' शीर्षक पर हिंदी में व्याख्यान दिया। फ्यूजन ऊर्जा के मूल सिद्धांतों, लाभों तथा स्वच्छ ऊर्जा के रूप में इसकी संभावनाओं पर प्रकाश डाला गया। विश्व स्तर पर चल रही प्रमुख परियोजनाओं, जैसे ईटर, और हालिया वैज्ञानिक प्रगति की जानकारी दी। जिसमें भारत की भूमिका, अनुसंधान क्षमताओं और अंतर्राष्ट्रीय सहयोगों को विशेष रूप से रेखांकित किया गया। डॉ. राज सिंह ने भविष्य में ऊर्जा सुरक्षा और जलवायु परिवर्तन से निपटने में फ्यूजन ऊर्जा की अहम भूमिका को स्पष्ट किया।

दिनांक 21 नवंबर 2025 को सीपीपी-आईपीआर के गैर-प्रशासनिक कार्मिकों के लिए डॉ. संध्या दवे द्वारा डेस्क टू डेस्क कार्यशाला का आयोजन किया गया। कार्यशाला में उन्होंने राजभाषा कार्यान्वयन हेतु राजभाषा विभाग की वेबसाइट पर उपलब्ध उपयोगी टूल्स की जानकारी दी। मशीन अनुवाद के लिए उपलब्ध कंठस्थ 2, बहुभाषी अनुवादिनी, हिंदी शब्द सिंधु 2 आदि पर विस्तृत चर्चा की गई। साथ ही हिंदी कार्य में आ रही कठिनाइयों को दूर करने के लिए प्रभावी उपाय भी बताए गए।

व्याख्यान के दौरान सीपीपी-आईपीआर के सेमिनार हॉल में उपस्थित स्टाफ सदस्य

डॉ. राज सिंह व्याख्यान देते हुए

Talk on New Gas Procurement & Management Process

On 20th January 2026, a talk on the newly launched Gas Procurement Process was delivered by Shri Parvez Mir from the Stores Section. The presentation provided an overview of the end-to-end gas procurement activities for IPR and FCIPT. It covered the types of gases in use, limitations of the earlier procurement procedures, and operational challenges faced in recent years. Shri Mir also explained the newly introduced procurement procedure, highlighting its advancements, streamlined processes, defined user roles and responsibilities, and overall benefits. The session concluded with glimpses of the new Online Gas Management Portal, aimed at improving efficiency, transparency, and ease of gas procurement.

Mr. Parvez Mir delivering the talk (Top Right). Audience attending the talk at IPR Seminar Hall (L)

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IPR Picnic 2026

IPR Staff Club Executive Committee 2025-2026 organised the Annual Picnic during 17–18 January 2026 to Kumbhalgarh Fort, Rajsamand Lake, Statue of Belief and Shrinathji Temple in Rajashtan. Around 130 people including staff and their families participated in the picnic

Group photo of the participants at 'Statue of Belief' one of the largest Shiva statues in the world in Nathdwara, Rajasthan

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