

| Abstract ID | Presentation | NAME | Name of the Organization | Country | Title |
|---|--------------|-----------------------|--|--------------|--|
| Poster Session: Large scale cryogenics II & Accelerator Cryogenics II Chairperson: Prof. Hirotaka Nakai & Prof. Tetsua Oka | | | | | |
| 152 | 9-P2-99 | Mr. PRADIP PANCHAL | INSTITUTE FOR PLASMA RESEARCH | India | Process optimization of helium cryo plant operation for SST-1 superconducting magnet system |
| 161 | 9-P2-100 | Mr. Jitendra kumar | Bhabha Atomic Research Centre, India | India | Helium Refrigeration System for Hydrogen Liquefaction Applications |
| 167 | 9-P2-101 | Mr. BHIKHALAL SONANI | DR .S& S S GHANDHY COLLEGE OF ENGINEERING | India | Effect of Compressor Inlet Temperature & Relative Humidity on Air Liquefaction Cycle Performance |
| 169 | 9-P2-102 | Mr. Ashish Shukla | RRCAT | India | Cold box Vessel Design for Medium Scale Helium Liquefaction system |
| 185 | 9-P2-103 | Dr. Vitaliano Inglese | CERN | Switzerland | Commissioning results of CERN HIE-ISOLDE and INFN ALPI cryogenic control systems |
| 238 | 9-P2-104 | Mr. Linglong Lei | Technical Institute of Physics and Chemistry,CAS | China | Study of a multi-strategy controller on a helium liquefier |
| 239A | 9-P2-105 | Dr. Jing LI | Technical Institute of Physics and Chemistry,CAS | China | Development of a Simulator for a 10kW@20K Helium Refrigerator Based on Siemens PLC S7-300 |
| 240 | 9-P2-106 | Dr. Chul Jin Choi | Institute for Basic Science | Korea, South | Technical design of helium cryogenic plant and operation modes for SCL3 linac of RAON |

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|-----|----------|----------------------|--|--------------|--|
| 243 | 9-P2-107 | Mr. Yanrong Meng | University of Chinese Academy of Science | China | Optimization Design of a Small High-speed Radial-axial Flow Cryogenic Turbo-expander Impeller |
| 259 | 9-P2-108 | Mr. Olivier Pirotte | CERN | Switzerland | The consolidation programs of the cryogenic systems of the ATLAS and CMS experiments |
| 261 | 9-P2-109 | Dr. Wensheng Lin | Shanghai Jiao Tong University | China | Study on cold energy utilization at LCNG fueling stations |
| 272 | 9-P2-110 | Prof. SURAJ BEHERA | NIT Rourkela | India | A methodology for fabrication of 2nd generation gas foil thrust and journal bearing for turboexpander used in nitrogen liquefier |
| 194 | 9-P2-111 | Mr. Andrew Lees | CERN | Switzerland | Design and Optimisation of Low Heat Load Liquid Helium Cryostat to House Cryogenic Current Comparator in Antiproton Decelerator |
| 219 | 9-P2-112 | Mr. Sungwoon Yoon | Institute for Basic Science | Korea, South | Installation and commissioning of the 2K-system for the SRF test facility |
| 252 | 9-P2-113 | Mr. KI WOONG LEE | Institute for Basic Science | Korea, South | Thermal analysis of helium distribution system for the heavy ion accelerator (RAON) |
| 253 | 9-P2-114 | Mr. Siddhartha Ghosh | Variable Energy Cyclotron Centre | India | Analysis of flow parameter of cryogenic delivery system of superconducting electron linac |
| 258 | 9-P2-115 | Mr. Jaehee Shin | IBS(Institute for Basic Science) | Korea, South | Construction Status of a Cryogenic System for Testing Superconducting Cavities and Cryomodules of RAON |

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|--|----------|--------------------------|--|---------------|---|
| 270 | 9-P2-116 | Mr. Hemant Patel | Raja ramanna center for advance technology | India | Design of Movable Shield for the Vertical Test Stand Cryostat |
| 271 | 9-P2-117 | Mr. Anupam Sinha | BARC | India | Design and Development of Cryo-Module Test System For 1.3 GHz LCLS-II Cryomodule |
| 313B | 9-P2-118 | Prof. Ralf Eichhorn | Cornell University | United States | Optimizing cryogenic parallel, single phase flows: an analytical approach |
| 319 | 9-P2-119 | Dr. Eric Smith | CLASSE, Cornell University | United States | Heat Exchanger Can Assembly for Provision of Helium Coolant Streams for Cryomodule Testing below 2K |
| Poster Session: Cryogenics for Fusion I & Space Cyogenics I Chairperson: Dr. Christian Hoa & Dr. V. Narayanan | | | | | |
| 45 | 9-P2-120 | Mr. RAKESHKUMAR PATEL | INSTITUTE FOR PLASMA RESEARCH | India | Installation and Commissioning of 80 K Liquid Nitrogen Booster System for SST-1 |
| 83 | 9-P2-121 | Mr. Dikens Christian | Institute for Plasma Research | India | Operation and Maintenance Experience of Helium Compressor Motor for 1.3kW HRL Plant |
| 84 | 9-P2-122 | Mr. Gaurang Mahesuria | Institute for Plasma Research | India | Pump Characterization of 80 K Liquid Nitrogen Booster System for SST-1 |
| 85 | 9-P2-123 | Mr. Atul Garg | Institute for Plasma Research | India | Performance of Superconducting Current Feeder System for SST-1 |
| 97 | 9-P2-124 | Mr. Samiran Mukherjee | Institute for Plasma Research | India | CFD based thermo-hydraulic analysis of hydroformed cryopanel for liquid helium flow |
| 283 | 9-P2-126 | Dr. Jyoti shankar Mishra | Institute for plasma research | India | System for Adsorption Isotherm Studies of Porous Carbon Materials Down To 4.5 K |

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|------|----------|------------------------|---|-------|---|
| 24 | 9-P2-127 | Mrs. Geetha Sen | LPSC, ISRO | India | Design of equipment for cryotreatment of APX-4 |
| 58 | 9-P2-128 | Mr. SUBRAHMANYA Mr. | ISRO Satellite Centre | India | On-orbit thermal performance of Imager cooler developed for INSAT-3D spacecraft |
| 86 | 9-P2-129 | Mr. Jayachandran K N | IIT Kharagpur | India | Numerical investigations on unstable direct contact condensation of cryogenic fluids |
| 99 | 9-P2-130 | Ms. Tisha Dixit | IIT Kharagpur | India | Prospective of employing high porosity open-cell metal foams in passive cryogenic radiators for space applications |
| 102 | 9-P2-131 | Mr. Xin Li | Technical Institute of Physics and Chemistry, CAS | China | Investigation of an adsorption refrigeration model with correlative experiments |
| 103 | 9-P2-132 | Prof. Pavitra Sandilya | Indian Institute of Technology Kharagpur | India | One-dimensional CFD analysis of subcooling of a cryogenic liquid by gas bubbling |
| 125 | 9-P2-133 | Mr. Arpit Mishra | Indian Institute of Technology Kharagpur | India | Effect of leading edge sweep on the performance of cavitating inducer of LOX booster turbopump used in semicryogenic engine |
| 300A | 9-P2-134 | Dr. Upendra Behera | Indian Institute of Science | India | Studies on vortex tubes for cryogenic application |

Poster Session: Cryocooler II

Chairperson: Prof. M.D. Atrey

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|-----|----------|--------------------------|---|-------|--|
| 132 | 9-P2-135 | Dr. Parthasarathi Ghosh | Indian Institute of Technology Kharagpur | India | Performance analysis of cryocoolers based on reverse Brayton cycle and its modifications for cooling HTS devices |
| 136 | 9-P2-136 | Prof. Junjie Wang | Technical Institute of Physics and Chemistry, CAS | China | Numerical investigation of multi-bypass type pulse tube cryocooler |
| 137 | 9-P2-137 | Prof. Shridhar Bapat | Indian Institute of Technology Bombay | India | Design analysis of a Helium recondenser |
| 144 | 9-P2-138 | Mr. Si Liu | Technical Institute of Physics and Chemistry CAS | China | Studies of phase shifter on a precooling type pulse tube cryocooler |
| 145 | 9-P2-139 | Mr. Wu xianlin | Technical Institute of Physics and Chemistry CAS | China | Numerical simulation of a 5W/40K Stirling-type pulse tube cryocooler |
| 210 | 9-P2-140 | Mr. Kong Chunhui | Technical Institute of Physics and Chemistry CAS | China | A 20 K phase change unit integrating with pulse tube cryocoolers |
| 211 | 9-P2-141 | Mr. MD ZAMAL NASER | Variable Energy Cyclotron Centre | India | Design and analysis of helical concentric heat exchanger for dilution fridge |
| 212 | 9-P2-142 | Mr. HIRAKLAL CHAKRABORTY | NATIONAL INSTITUTE OF TECHNOLOGY CALICUT | India | Modeling and analysis of Joule-Thomson System |
| 225 | 9-P2-143 | Mr. Kishor Kumar V V | Government College of Engineering Kannur | India | Hydrodynamic parameters of regenerator of a miniature stirling cryocooler |
| 232 | 9-P2-144 | Mr. Siva Krishna | NIT CALICUT | India | Thermodynamic Analysis of Free Piston Stirling Cryocooler Including Regenerator Dead Volume |

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|---|----------|-------------------------|--|---------------|---|
| 233 | 9-P2-145 | Mr. ARJUN M S | NATIONAL INSTITUTE OF TECHNOLOGY, CALICUT | India | Dynamic and thermodynamic analysis of stirling cryocooler |
| Poster Session: Heat Transfer II Chairperson: Dr. Jaraslaw Fydrych | | | | | |
| 100 | 9-P2-146 | Dr. Liao Wun-Rong | National Synchrotron Radiation Research Center, Taiwan | Taiwan | Development of separator cooling system for helium |
| 111 | 9-P2-147 | Prof. Steven Van Sciver | Florida State University | United States | Measurement of the apparent thermal conductivity of multi-layer insulation (MLI) for variable boundary temperatures |
| 118 | 9-P2-148 | Mr. Guochao Feng | TIPC, Chinese Academy of Science | China | Numerical Simulation of Heat Transfer for Wall-type and Fin-type Heat Exchanger |
| 131 | 9-P2-149 | Mrs. Dong Xu | TIPC, Chinese Academy of Science | China | Theoretical analysis of start-up power in helium pulsating heat pipe |
| 141 | 9-P2-150 | Dr. Sandip Pal | VEC Centre | India | Numerical simulation of plate-fin heat exchanger for helium liquefier and its validation at VECC |
| 147 | 9-P2-151 | Dr. Shine S R | Indian Institute of Space Science and Technology | India | Investigations on two phase cryogenic chill-down process |
| 154 | 9-P2-152 | Mrs. MANJUSA JENA | DEPARTMENT OF PHYSICS, UTKAL UNIVERSITY | India | Magnetohydrodynamic Couette flow of a non-Newtonian fluid in a rotating system with heat transfer |
| 157 | 9-P2-153 | Mr. Chuang Ping Shun | National Synchrotron Radiation Research Center, Taiwan | Taiwan | Development of Multi-Channel Line for NSRRC Cryogenic System |

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|---|----------|--------------------------|---|-------|---|
| 224 | 9-P2-154 | Dr. Tapas Nandi | Indian Institute of Technology, Kharagpur | India | Heat transfer and flow friction correlations for perforated plate matrix heat exchangers |
| Poster Session: Superconductivity for Power I Chairperson: Dr. Sastri Pamidy | | | | | |
| 101 | 9-P2-155 | Ms. IPSITA DAS | IIT KHARAGPUR | India | Design Procedure for 220kV-3kA, 200m High Temperature Superconducting power cable |
| 107 | 9-P2-156 | Mrs. Poulomi Brahmachery | Indian Institute of Technology | India | Optimum Configuration of HTS SMES coil for Maximum energy storage |
| 115 | 9-P2-157 | Mr. Anirban De | Variable Energy Cyclotron Centre/DAE | India | Design, development and testing of a 0.6MJ/3.4kW Prototype Superconducting Magnetic Energy Storage System based Dynamic |
| 124 | 9-P2-158 | Mr. Taichi Nishihara | Meisei University | Japan | Analysis of FCL effect caused by superconducting DC cable for railway system under short circuit |
| 138 | 9-P2-159 | Mr. Sudheer Thadela | Indian Institute of Technology | India | Studies on Polypropylene Laminated Paper (PPLP) for High T _c Superconducting Power Cables |
| 206B | 9-P2-160 | Dr. Hirofumi Watanabe | Chubu University | Japan | Critical current measurement for design of HTS DC power cables |
| 206A | 9-P2-161 | Dr. Hirofumi Watanabe | Chubu University | Japan | Cooling test of the 500 m class superconducting DC power transmission system |

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|---|----------|---------------------------|----------------------------------|-------------|---|
| 214 | 9-P2-162 | Mr. Venkata Ramana Uppada | Lovely Professional university | India | Parametric Analysis of AC losses in 765 kV/1B kA in High Temperature Superconducting (HTS) cables for High Voltage transmission |
| 215 | 9-P2-163 | Mr. Gadekula Rajesh Kumar | Lovely Professional University | India | Analytical and Computational Investigation on Cooling Strategies of Cold Dielectric Type HTS cables |
| 407 | 9-P2-164 | Mr. Abhijit Dayal Raj | Lovely professional univercity | India | Friction factor correlation developed for turbulent flow in corrugated pipe used in High Temperature superconducting cables |
| Poster Session: Energy Storage, Superfluidity, Reliability & Analysis Chairperson: Prof. kanchan Chowdhury | | | | | |
| 175 | 9-P2-165 | Mr. Ankit Jain | Bhabha Atomic Research Centre | India | Studies on steady state and transient response of floating pad journal bearing for high speed cryogenic turboexpanders |
| 183 | 9-P2-166 | Dr. Friedrich Haug | CERN | Switzerland | A small scale remote cooling system for a sc cyclotron magnet |
| 203 | 9-P2-167 | Ms. Fuzhi Shen | TIPC, Chinese Academy of Science | China | Cryogenic Adsorption of Helium-Based Gas Mixture on Activated Carbon |
| 227 | 9-P2-169 | Prof. Junjie Wang | TIPC, Chinese Academy of Science | China | Performance analysis of liquid air energy storage utilizing LNG cold energy |
| 229 | 9-P2-170 | Dr. Junjie Wang | TIPC, Chinese Academy of Science | China | Theoretical analysis of compressor on liquid air energy storage |

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|---|----------|---------------------|--|-------|---|
| 239B | 9-P2-172 | Dr. Jing LI | TIPC, Chinese Academy of Science | China | Reliability and Availability Analysis of a 10kW@20K Helium Refrigerator |
| 265 | 9-P2-173 | Mr. SANDEEP SINGH | VARIABLE ENERGY CYCLOTRON CENTRE | India | Flow analysis of a Joule Thomson valve for producing 2K superfluid helium from 3K liquid helium |
| Poster Session: Superconducting Material II Chairperson: Prof. Tetiana Prikhna | | | | | |
| 223 | 9-P2-174 | Dr. DINESH TRIPATHI | Galgotias University | India | The effect of Co-current doping of nanoscale carbon and Aluminium Nitride on superconducting properties of bulk MgB2 superconductors |
| 245 | 9-P2-175 | Mr. RADHIKESH NAIR | INDIRA GANDHI CENTRE FOR ATOMIC RESEARCH | India | Magneto-Transport and Magnetization studies of the Superconducting system Nd _{1.85} CeO _{0.5} CuO ₄ + xAg (x=0, 10 wt %) |
| 249 | 9-P2-176 | Mr. D.S. Nadig | CENTRE FOR CRYOGENIC TECHNOLOGY, IIScBANGALORE | India | Effects of cryogenic treatment on the wear properties of automobile disc brakes |
| 251 | 9-P2-177 | Mr. Rajiv Sharma | Institute for Plasma Research | India | Development of indigenous insulation material for superconducting magnets and study of its characteristics under influence of intense neutron irradiation |
| 273 | 9-P2-178 | Dr. Anurag Gupta | National Physical Laboratory | India | Effect of σ - and π - band modification on the normal and superconducting state properties of bulk MgB ₂ . |

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| 274 | 9-P2-179 | Mr. Wilco van de Camp | University of Twente | Netherlands | Transverse crack initiation under combined thermal and mechanical loading of Fibre Metal Laminates and Glass Fibre Reinforced Polymers |
| 297A | 9-P2-180 | Prof. Abdelhakim Nafidi | University Ibn Zohr | Morocco | Influence of the design parameters and temperature on bands structure and magneto-transport properties in semimetallic two-dimensional InAs/GaSb far-infrared detector |
| 288 | 9-P2-181 | Dr. MARUTI KHOT | WALCHAND COLLEGE OF ENGINEERING SANGLI | India | Flexure bearing for miniature linear compressor |
| 307B | 9-P2-182 | Dr. Davide Uglietti | EPFL - SPC | Switzerland | Hoop stress measurements on BSCCO tape reinforced with carbon fibre |
| 323B | 9-P2-183 | Mr. Upendra Prasad | Institute For Plasma Research | India | The validation tests of fusion grade superconductors |
| 328B | 9-P2-184 | Dr. Alexander Usoskin | Bruker HTS GmbH | Germany | Long length HTS coated conductors with double disordered YBCO for high field applications |
| 330B | 9-P2-185 | Dr. PRAVEEN RS | INDIAN SPACE RESEARCH ORGANIZATION | India | Investigation on Composite Throat Insert For Cryogenic Engines |