Day-1: 16 January 2019

Slot	Abstract ID	Title	Presenter
Poster Session: P1-A: Cryocoolers, Regenerators			
Session Chair: Hemant Naik, SVNIT			
P1-A-1	150	Design and Prototype of Sub-Cooled Liquid Nitrogen System for HTS Magnets	Arvind Tomar
P1-A-2	151	Revival of Cold Leak in Aluminium Alloy Liquid Helium Dewar	Vijay Arolkar
P1-A-3	162	Experimental Investigation of Stratification and Self Pressurisation in a High Pressure Liquid Nitrogen Storage Tank	Vishnu B
P1-A-4	166	Development of Cryocooler Based Zero Boil-Off VTI Cryostat for Superconducting Solenoid Magnet	Santosh Sahu
P1-A-5	169	Design and Development of Free Piston Dual Purpose Linear Compressor for Application at 80K and 250K	Kiran Kenchavvagol
P1-A-6	206	Test Results of Indigenous Prototype 3-Stream (He/He/He) Plate-Fin Heat Exchanger of He Plant	Ananta Sahu
P1-A-7	208	Design and Development of Single Stage GM-Type Pulse Tube Refrigerator of 5-10 W @ 70 K at NIT Rourkela for Nitrogen Liquefaction	Debashis Panda
Poster Session: P1-B: Cryogenic Electronics			
P1-B-8	82	In-house Development of Machine Condition Monitoring System for Compressor Station of 1.3 kW Helium Refrigeration Plant at IPR	Dashrath Sonara
P1-B-9	173	Preliminary Capacitance Measurements on Perspex Model of Void Fraction Sensor for Cryogenic Fluids	Vivek G A
P1-B-10	174	Development of a Complete Cold Electronic Based Discrete Level Sensor	Pankaj Sagar
P1-B-11	192	Development of Simple Capacitance and Diode Based Void Fraction Measurement Sensors for Cryogenic Two Phase Flow	Upendra Behera
Poster Session: P1-C: Cryogenic Power Cables and Leads			
Session Chair: Tapas Nandi, IIT Kharagpur			
P1-C-12	90	Hydraulic Characterization of Flexible Corrugated Pipes for 80K HTS Applications	Pradip Panchal
P1-C-13	104	Development of Lab Scale Sub-Cooled Liquid Nitrogen Facility for HTS Applications	Nitin Bairagi
P1-C-14	110	Conceptual Design of 1 kA Conduction Cooled Current Leads for HTS Coils	Atul Garg
Poster Session: P1-D: Cryogenics Industrial Applications			
P1-D-15	47	Effect of Glycerol Concentration on Cryopreservation	Snehlata Mishra
P1-D-16	64	Theoretical and Experimental Investigations on Magnetic Abrasive Finishing (MAF) Facility for Finishing of Flat and Cylindrical Components for Cryogenic Applications	Sandeep Nair
P1-D-17	74	Automation of LN2 Storage Tanks of SST-1 Cryogenic System at IPR	Rohitkumar Panchal
P1-D-18	109	Thermo-Structural Analysis of Radiation Shield of SST-1 Cryopump	Vishal Gupta
P1-D-19	113	Fatigue Strength Properties of Stainless Steel (SS304) at Cryogenic Temperatures	Durgesh Nadig
P1-D-20	120	Emissivity Studies of Cryopump Compatible Components Down to 90K	Ganesh Bhat
P1-D-21	125	Development of Interactive Graphical Systems on Web and Mobile platform for Cryogenics Related Mathematical Computations	Arya Keni

Poster Session:P1-E: Expanders, Pumps, Compressors			
Session Chair: P. M. Ardhapurkar, MGI-COET			
P1-E-22	80	Development of Aerostatic Bearing System for Balancing of Ultra-High Speed Turboexpander Rotors Used in Helium Liquefiers/Refrigerators	Ankit Jain
P1-E-23	107	Experimental Studies on Spiral Groove Thrust Bearing	Satish Bharti
P1-E-24	123	FE Analysis, Development and Experimental Investigation of Flexure Bearing Geometries for Linear Motor Compressor	Maruti Khot
Poster Session: P1-F: Fluid Mechanics, Heat Transfer			
P1-F-25	94	Thermal Performance Evaluation Method of Multistream Plate Fin Heat Exchanger	Jitendra Kumar
P1-F-26	114	Selection Criteria of Cost-effective Cryogenic System for a Cryopump Based on Heat Load Estimation	Srikumar Nayek
P1-F-27	127	CFD Analysis of the Evaporating Two-Phase Flow in the Slug Flow Regime of a Cryogenic Fluid in a Microchannel	Javed Akhter
P1-F-28	130	Numerical Study of Oscillatory Flow Through Open Cell Metal Foam	Soumya Nayak
P1-F-29	134	Assessment of Enhanced Surfaces for Heat Transfer involving Single-Phase Cryogenic Fluids	Rajendra Kumar
P1-F-30	138	Effect of Ring and Porous Plate Gas Sparger on Injection Cooling	Chowhan Kiran Kumar
P1-F-31	187	Jet and Shock Characteristics of Collapsing Cavitating Bubble in Cryogenic Environment	Arpit Mishra
Poster Session:P1-G: Large-Scale Refrigeration & Liquefaction			
Session Chair: Rajvir Doohan, RRCAT			
P1-G-32	43	Performance Optimization of Coiled Finned Tube Heat Exchanger for Medium Size Helium Liquefier	Shreya Mehta
P1-G-33	70	Experimental Investigations on Cryogenic Adsorption of Nitrogen over Activated Charcoal	Abhilash Chakravarty
P1-G-34	88	Development of a 1000 L Liquid Helium Receiver Dewar at BARC	Naseem Ansari
P1-G-35	89	Influence of Technical Issues on the Performance of Helium Screw Compressors	Jayant Patel
P1-G-36	141	Experimental Studies of Single Bed Activated Carbon-R134a Adsorption Refrigeration System	Jagadeesh Bharani
P1-G-37	168	Development of a Liquid Helium Transfer Line	L. N. Srikanth G.
Poster Session: P1-H: Large-Scale Systems, Facilities & Testing			
P1-H-38	56	Design of a Cryogenic Distribution System for Cold Neutron Source Test Cryostat	Tejas Rane
P1-H-39	69	Efforts to Mitigate Direct Heat in-Leaks in SST-1	Hiren Nimavat
P1-H-40	108	Development and Performance Testing of Phase Separator for Liquid Nitrogen Distribution Network	Suresh Babu
P1-H-41	129	Development of Liquid Nitrogen Based Cryo-Sorption Cryopump	Samiran Mukherjee
P1-H-42	137	Operational Experience of Helium Liquefier at TIFR, Mumbai	K. A. Jaison

Poster Session:P1-I: Superconductivity for Accelerators and Fusion Programs			
Session Chair: Vaishali Naik, VECC			
P1-I-43	233	Remote Coupler Controls for Nb Superconducting RF LINAC at IUAC, New Delhi	Rajendra Dutt
P1-I-44	264	Mechanical Design of 650 MHz, Beta=0.61, 5-Cell, Dressed SRF Cavity as per Functional Requirement Specification under IIFC Collaboration	Sundeep Ghosh
Poster Session: P1-J:Superconductivity for Other Applications			
P1-J-45	38	Analytical Study of Aluminium Alloy Based Liquid Helium Dewar	Lokesh Soni
P1-J-46	87	Comparison of Magnetic Source Depth Localisation in Magnetometer and Gradiometer	Pragyna Parimita Swain
P1-J-47	116	Performance Analysis of a NbTi Level Sensor While Filling LHe into a Cryostat	Keerthi Raj Kunniyoor
P1-J-48	236	Investigation of Magnetostriction in Superconductors and a Comparison	Ashok K.b.
P1-J-49	257	In the Quest of High Tc Multiferroic Material	Snehlata Aggarwal
Poster Session:P1-K:Superconductivity for Power Applications			
P1-K-50	154	Optimum Location of R-SFCL in an IEEE Bench-Marked Four-Machine, Two-Area Test System	Abhay Singh Gour
P1-K-51	158	Electromagnetic Analysis of 5 MJ High Temperature Superconducting Magnetic Energy Storage (SMES) Coil for Micro Grid Applications	V A S Muralidhar Bathula
P1-K-52	159	Experimental Investigations on Power frequency Electrical Breakdown Characteristics of Liquid Nitrogen for HTS Power Devices	Divya Sharma
Poster Session: P1-L:YBCO, BSCCO Wires &Tapes			
Session Chair: Sundar Sankaran, BARC			
P1-L-53	83	I-V Characterization of HTS Tape Under Tensile Stress Using Cryogenic UTM along with FEM Analysis	Ankit Anand
P1-L-54	261	Characterization and Joining of Superconducting Tape	Amber Shrivastava
	Poster Session:P1-M: Superconducting Magnet Systems		
P1-M-55	97	Performance Analysis of Conduction Cooled HTS Based Magnet Coil	Jedidiah Pradhan
P1-M-56	126	Numerical Analysis of Cooldown of Large Magnets for Low Energy Beam Line for FAIR	Javed Akhter
P1-M-57	140	Quench Characteristics of Superconducting Magnets of Low Energy Beam Line for FAIR Facility	Pankaj Kumar
P1-M-58	163	Development of Cryogenic Test Setups for Thermal Conductance & RRR Measurements at 4.2 K for Superconducting Magnet and RF Cavities	Udai Sachan

Day-2: 17 January 2019

Poster Session: P2-A: Cryocoolers, Regenerators			
Session Chair: Upendra Behera, IISc			
Slot	**Abstract ID**	**Title**	**Presenter**
P2-A-1	52	Magnetocaloric Effect in Rare Earth Chromites	Subodh Kumar De
P2-A-2	73	Performance Validation of Passive Radiant Cryo-cooler for Detectors in Meteorological Payload of INSAT-3D Satellite Through Five Year in-Orbit Data	Dhananjay Tijare
P2-A-3	79	Analysis of Stirling Cycle Pulse Tube Cryocooler	Manisha Lembhe
P2-A-4	93	Repair and Revival of Two Stage Cryo Cooler of NMR Cryo Probe-Head	Manoj Naik
P2-A-5	115	Development of a Linear Compressor for a Stirling Cycle Based Cryocooler	Isaac De Souza
P2-A-6	122	Design, Manufacturing and Testing of Single Stage Stirling Cryocooler for Cooling Infrared Sensors Used in Space Applications	Fayaz Kharadi
P2-A-7	128	Sealing Performance of Non-Metallic Gaskets with Indium Wire Seal at Temperatures Down to 10K	Paresh Panchal
P2-A-8	132	Effect of Wall Roughness Elements on Thermal Stratification and Self Pressurisation in LH2 Storage Tanks	Soumyajit Bhowmick
Session Chair: Srinivasan Kasthurirengan, IISc			
P2-A-9	145	Porosity and Heat Transfer Characteristics Analysis of Stirling Cryocooler Regenerator Using Darcy Permeability and Forchheimer Coefficient	Anjali Pokkalath
P2-A-10	178	Development of a Compact Stirling Pulse Tube Cryocooler	Derick Abraham
P2-A-11	186	Exergy Analysis of a Pulse Tube Cryocooler	Prateek Malwe
P2-A-12	188	Dynamic Study of Reverse Brayton Cryocooler for Variable Heat Loads in HTS Cable	Rohan Dutta
P2-A-13	190	Analysis and Design of an Electromagnetically Driven Dual Mode Cooler	Bibek Kumar
P2-A-14	191	Phasor Analysis of Orifice Pulse Tube Cryocooler	Saurabh Randive
P2-A-15	195	Impact of Position of Superconducting Fault Current Limiter on Fault Mitigation in Power Systems-A Review	Senthil Kumar J
P2-A-16	202	Detecting and Locating Leaks in Natural Gas Pipeline	Rajkamal Sah
Session Chair: Nihar Walimbe, DPCOE			
P2-A-17	175	Capacitance Measurement Circuits for Void Fraction Sensors for Cryogenic Fluids	Vivek G A
P2-A-18	215	An Offline Technology Development for Low beta Superconducting Cavity at BARC	Bharat Kukreti
P2-A-19	216	Thermo-Pneumatic Analysis of Single Stage Gifford-McMahon Cryocooler	Debashis Panda
P2-A-20	230	Design and Development of a Turboexpander for Liquefaction of Nitrogen	Manoj Kumar
P2-A-21	240	Helium Re-Condenser for 1.5T Zero Boil Off (ZBO) MRI Cryostat	Ravikant Paswan
P2-A-22	249	Characterization of Insulation Sample in Paschen Test Set-up at IPR	Swati Roy
P2-A-23	260	Challenges of Adopting Large-Scale Air Compressor as He Compressor for Helium Plant	Ananta Sahu
P2-A-24	262	Design and Analysis of a GM-Type Single Stage Pulse Tube Refrigerator	Pankaj Kumar
P2-A-25	263	Case Study of Sintered Regenerator Performance in StirLIN-4 Nitrogen Liquefier	Praveen Topagi

Poster Session: P2-B: Cryogenics Industrial Applications			
Session Chair: Ranjana Gangradey, IPR			
P2-B-26	117	Design and Fabrication of Laboratory Scale Cryogrinder for Rubber Flashes	Preethi V
P2-B-27	119	Theoretical Comparison of Thermo-Mechanical Behavior of a Tension Rod and a Coil as Dewar Support	Virdi Parmit Singh
P2-B-28	121	Numerical Study on Carbon Capture by Desublimation	Rajkonwar Amit
P2-B-29	135	Development of Graphical Visualization System using LabVIEW platform for Cryogenic Plants in TIFR, Mumbai	Ashutoshkumar Yadav
P2-B-30	160	Development of an Experimental Setup of a Cryogenic Packed-bed Thermal Energy Storage System	Rohan Dutta
P2-B-31	189	Analytical Investigation of the Collapse Factor for a Cryogenic Storage Tank for Different for Propellant Combinations	Snehal Kadbane
P2-B-32	194	Improvements of Design and Configuration of Claude Based Direct LNG Boil-off Gas Reliquefiers	Sarun Kumar Kochunni
P2-B-33	209	Performance Evaluation of Plate Fin Heat Exchanger at Cryogenic Temperature: An Experimental Investigation	Ajay Gupta
P2-B-34	222	Retrofitting Cryogenic Air Separation Plant Having External Type of Oxygen Compression into Internal Type	Kanchan Chowdhury
P2-B-35	243	Design of Bath Type Cryogenic System for Near Field Scanning Optical Microscope	Aditya Garde
Poster Session: P2-C: Expanders, Pumps, Compressors			
Session Chair: Shankar Krishnan, IIT Bombay			
P2-C-36	170	Study on Pumping Performance of a Cryo cooler Based Cryosorption Pump	Jyotishankar Mishra
P2-C-37	198	Study of Xenon Pumping using Charcoal Coated Cryo-Panel at 10K	Pratikkumar Nayak
Poster Session: P2-D: Fluid Mechanics, Heat Transfer			
P2-D-38	59	Performance comparison of a Thermoacoustic Engine having Different Stack Geometry using CFD Simulation	Sudeep Kumar Gupta
P2-D-39	72	Liquid Nitrogen Two-Phase Flow Behaviour and Pattern in Horizontal Pipe	Gaurav Singh
P2-D-40	142	Slosh Mitigation in Road Transportation of Cryogens using Open-Cell Metal Foam: An Analytical Approach	Ritesh Mandal
P2-D-41	155	Applicability of Mechanistic Models and Empirical Correlations for Critical Heat Flux in Transfer Line Cool-Down Boiling	Ankit Kumar
P2-D-42	165	Experimental Investigation on Two Phase Flow through Transfer Line Curvatures	Bindu S S
P2-D-43	176	Effect of Deep Cryo Treatment on Selected Morphological Characteristics of Hybrid Silica-Iron Oxide (SiO2-Fe2O3) Nano Particles	Gururaj Gokak
P2-D-44	182	Application of Multiple Interacting Bubbles for Particle-Fragmentation at Cryogenic Temperature	Arpit Mishra
P2-D-45	275	Two-Phase Flow Analysis of Steam Jet Injection in Water Pool	Anant Singhal

Poster Session: P2-E: Thermal Insulation Systems			
Session Chair: Gireesan Katholil, IGCAR			
P2-E-46	35	Comparison of Cryogenic Insulation Materials in Temperature Range of 300K to 80K	Sonal Desai
P2-E-47	227	A Novel Cost Effective Cross-Linking Polymers-Graphene Oxide Nanocomposite Cryogel Films and Fibrous Mesh Films for Thermal Insulation Applications	Shrabani Ghosh
Poster Session: P2-F: Large-Scale Systems, Facilities & Testing			
P2-F-48	245	Evidence of Strain Mediated Magnetoelectric Coupling in Ferrite-Ferroelectric Ceramic Composites at Low Temperature	Atiya Farheen
Poster Session:P1-G: Superconductor Measurements			
P2-G-49	106	Current Dependence of Transition Temperature and Normal State Resistance of Disordered Niobium Nitride Thin Films	Thanikai Arasu A V
P2-G-50	204	Design of Characterization Set-up for Measurement of Critical Magnetization Current Density of HTSC Using Force Method	Vikas Teotia
P2-G-51	248	Magnetization Measurements on NbTi Multi-filamentary Superconducting Strand for SSR2 Magnets for PIP-II	Kumud Singh
Poster Session: P2-H: Superconducting Magnet Systems			
Session Chair: Tamal Bhattacharyya, VECC			
P2-H-52	143	Design, Development and Testing of Liquid Helium Cooled 1MJ Room Temperature Bore Superconducting Solenoid Magnet	Udai Sachan
P2-H-53	246	Pressure Drop and Mass Flow Measurement of Nb3Sn/Cu Based CICC	Arun Panchal
Poster Session: P2-I: Superconductivity for Power Applications			
P2-I-54	152	Design of a Laboratory Scale HTS Based SMES	Abhay Singh Gour
P2-I-55	156	A Review on Development of High Temperature Superconducting Synchronous Machines	V A S Muralidhar Bathula
P2-I-56	157	A Study on High Temperature Superconducting (HTS) Double Pancake Field Coils for HTS Synchronous Machines Applications	V A S Muralidhar Bathula
P2-I-57	242	Characterization of SS-Laminated 2G-HTS Tapes for SFCL Applications	Sumit Chand
P2-I-58	266	A Twisted Conductor Design for Superconductor	Pranoti R. Raut