One Day Workshop on Low Temperature Physics & Quantum Metrology

23rd April 2026 (Thursday)

Organized By

ICC-North Zone & CSIR-National Physical Laboratory, New Delhi

Venue: Conference Hall, 2nd Floor, Apex Metrology Laboratory, NPL

P R O G R A M M E

TIME	
	Inaugural Session
10:00 – 10:02	Welcome address by Dr. Tushar Bhowmick, Chairman, ICC-North Zone
10:02 – 10:10	Birth of ICC- Role of NPL by Dr. R. G. Sharma
10:10 – 10:12	ICC Directory "CRYO-CONNECT"- A Brief report by Dr. Hari Kishan
10.12 – 10.27	Release of CRYO-CONNECT & Role of Low Temperature Physics in Metrology by Director, NPL
10:30 – 11:05	Inaugural talk by Dr. R.G. Sharma, President, ICC [Title: How Superconductors are Advancing to Unlock Inexhaustible Fusion Energy]
11:05 – 11:08	Vote of thanks by Dr. Pallavi Kushwaha
11:08 – 11:20	Group Photograph followed by High Tea
	Technical Session 1
	Chairman: Dr. A.K. Gupta
11:20 – 11:50	Efforts towards making of a Dry Dilution Refrigerator at IUAC, New Delhi By Dr. Anup Choudhury, IUAC, New Delhi
11:50 – 12.20	Quantum Thermometry: Boltzmann constant based New Kelvin By Dr. Dilip D. Shivagan, NPL, New Delhi
12:20 – 12:45	Superconducting Photon Detectors and its Applications By Dr. Anish M. Bhargav, NPL, New Delhi
12:45 – 01:10	Low temperature NMR in Metrology: Principles, Techniques and Applications By Dr. Sanjoy K. Sheet, NPL, New Delhi
01:10 – 2:10	Lunch Break

Technical Session 2

Chairman: Dr. V.N. Ojha

02:15 – 02:40	Josephson system for Quantum Voltage Standard By Dr. Sandhya M. Patel, NPL, New Delhi
02:40 – 03:05	Emerging Low Temperature Behavior in Topological Kagome-Lattice Magnet By Dr. Ashim K. Pramanik, JNU, New Delhi
03:05 – 03:30	Superconducting solutions for Future Smart Grid systems By Dr. R.S. Meena, NPL, New Delhi
03:30 – 03:55	Cryogenics Plants and its role in Quantum Metrology at NPL By Mr. Rajeev Sharma, NPL, New Delhi
03:55 – 04:25	Panel Discussion – How to strengthen ICC-North Zone Moderator - Dr. R.G. Sharma, President ICC
04.25 – 04.30	Concluding Remarks by Dr. Hari Kishan

***