Operation of cryogenic facility in e-way at Tata Institute of Fundamental Research, Mumbai, INDIA

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In an attempt towards the development of modern, model and paperless cryogenic facility, the Low Temperature Facility of Tata Institute of Fundamental Research, at Mumbai, India; carried out many automation works using programmable logic controller (PLC) and other modern electronic tools, with the objective of bringing the entire plant operation to your palm whenever and wherever you are.

Efficiency in the plant operation by keeping a watch on the plant healthiness, advance indication about the possible plant problem by means of pre-warning alarms, so that the remedial action can be taken well prior to the actual failure affects the plant operation, reduction in plant down time were achieved by the automation works.

Large size in our cryogen production, controlling the complicated helium liquefier, meeting the uninterrupted supply of cryogen to the users on "any time availability basis", safety in handling cryogens and high pressure gas, effective usage of limited skilled manpower etc., all these requirements call for the definite need of modern electronic gears and gadgets.

The talk will describe in details about the automation works carried out at our cryogenic facility at TIFR.