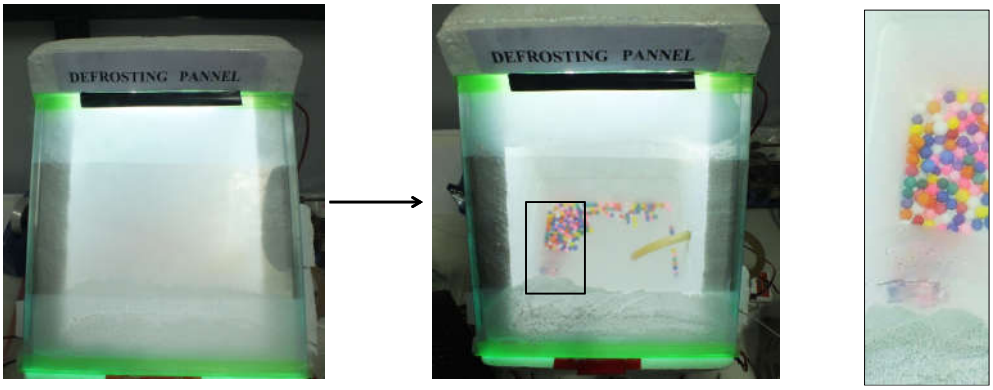
Defrosting panels

The changes in the climatic condition often result in frosting and icing that severely affect human life, especially in cold countries. Frost formation and icing pose serious safety issues for aircrafts, telecommunication and road safety signals by blocking the displays, and thus leading to traffic failure and severe accidents. Electrothermal or joule heating is considered to be one of the most efficient approaches for defrosting.

Metal mesh with seamless junctions are ideal joule heaters for large area applications. With nominal power, i2Ms can defrost the host substrate effortlessly and enhance visibility, even while working at subzero polar temperatures!

Below is shown a photograph of a glass covered with frost created by liquid nitrogen. A part of the front glass is joule-heated using an embedded i2M. Through the centre defrosted region, the scene behind is clearly visible. Some of the usage area are

- In supermarket freezers and cold item displays to reduce the amount of environmental heat that reaches the contents while allowing customers to view what is inside.
- Outdoor security camera housings to prevent frost from forming and obscuring the view of the camera.
- In material handling equipment, military ground based vehicles, naval flight deck equipment, aircraft windows and so on.



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