

# Collapsing Balloon

## **Purpose:**

To demonstrate Charles' Law.

## **Required Materials:**

Balloons    Liquid Nitrogen    Dewar Flask    Metal Pan

## **Procedure:**

Pour liquid Nitrogen into a metal pan. Place an inflated balloon into the liquid Nitrogen. The balloon decreases in volume while in the liquid Nitrogen. Then take the balloon out and notice that the balloon starts to expand again. Proving Charles' Law that when a gas is heated, the volume increases, and when it is cooled, the volume decreases.

**Reaction:** None

## **Waste:**

Leave the liquid Nitrogen to evaporate in a fume hood. Place the balloon in the nearest Recycle bin.

