



## CONTACT

**PHONE:** +91 9224410022

**EMAIL:** kavitadhanawade2@gmail.com

## FUNDING

ASHRAE Grant \$3020

## PARTNERSHIPS

ASHRAE LTCoE Student Branch

## DURATION

1 years to design, develop, & test

## Dr. KAVITA H. DHANAWADE

Dr. Kavita Dhanawade is a Professor of M.E & Associate HOD at Lokmanya Tilak College of Engineering (LTCoE). She's also Faculty Advisor at ASHRAE LTCoE Student Branch. She's been teaching HVAC & R, thermodynamics, heat transfer to the students from past 25 years. She's also serving as the BOG member to ASHRAE MUMBAI Chapter.

## Design & Development of Multiple Evaporator Refrigeration System for Food Storage using Solar energy

LOKMANYA TILAK COLLEGE OF ENGINEERING, UNIVERSITY OF MUMBAI

## OUR STORY

We gained a tremendous amount of experience while designing & making the Multiple Evaporator Refrigerator working on Nano Fluid & Powered by Solar. The process of creating the machine was exhilarating. After numerous trials & errors, we were able to settle on the following design. We gained a thorough understanding of Nano Fluids. When we were making our own design, we were quite excited. Making our design was actually like a dream come true. To ASHRAE alone is all the credit due.

## OUR PROJECT

Our project's innovative idea tackles issues with geometry, R134a & Nano Fluid mixing, two cooling chambers operating on a single system, & insufficient refrigerant supply to both cabinets. To ease commercialization, the system body was designed to be modular. Students might learn about the configuration & operation of an eco-friendly & effective cooling system using the experimental test equipment.

