P Vijay
CV

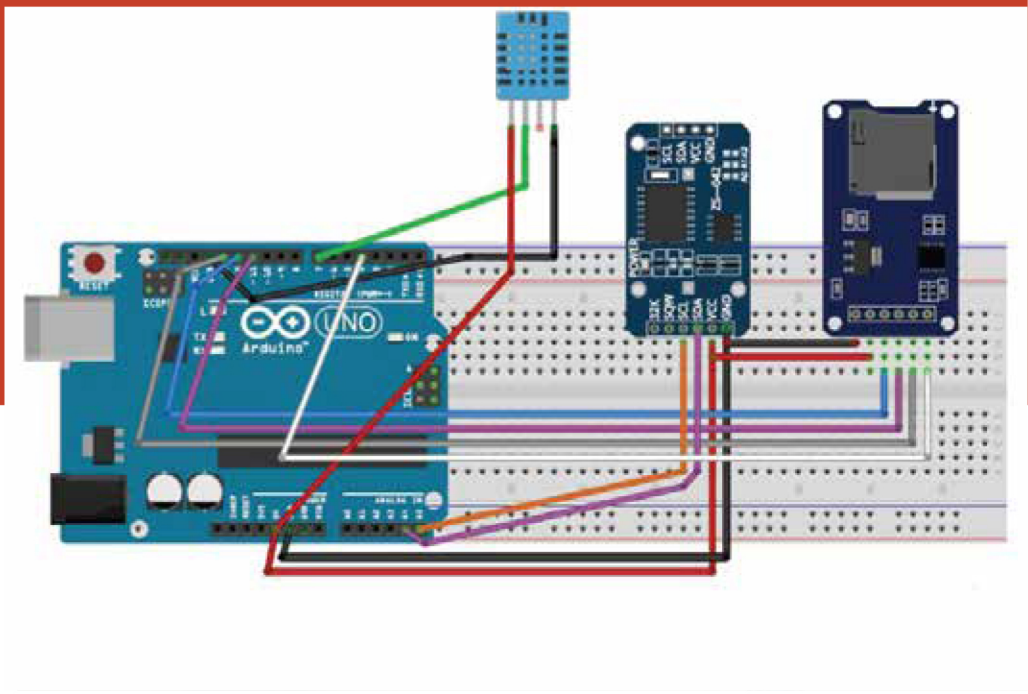
Diya K
CV

Manasa S
CV

Naveen Kumar C L
CV

05 PROJECT

THERMAL INSULATION OF BUILDING WALLS USING NEOPRENE FOAM SHEET



Buildings are large consumers of energy, in every country. Heating and cooling loads hold a substantial share of this, and this can be reduced by various means - one of which is thermal insulation of the building. The demand for energy efficient buildings has been rising sharply. There are various materials that can be used as thermal insulating materials. In our study, we have opted for neoprene foam sheet as a thermal insulating material.

Neoprene is known for its chemical stability and thermal insulating properties. Other properties that are very important are that it is chemical resistant, waterproof and durable. Considering these properties, the experiment with neoprene foam sheet as a thermal insulating material for the concrete unit is conducted. Using temperature data logger, the temperature within the concrete unit is measured, which determines the amount of insulation provided.

Features:

· Finding an alternative for EPS and XPS foam sheet

· Using neoprene foam sheet which has excellent thermal insulating properties

· Estimating cost, using different thermal insulating foamed sheets

· Reducing the burden on ACs, and maintaining the temperature within the building walls