Abstract

The Laboratory Room is a central space for student research, measurement, and scientific training activities. With the number and high level of complexity of activities in the room, a room is required to meet thermal comfort so that users can move well. The application of displacement ventilation aims to determine and understand whether this air distribution can increase the thermal comfort of the building physics laboratory space. The selection of the object of this study is based on the potential distribution of air displacement which can increase the thermal comfort of the Building Physics Laboratory space in particular and the city of Bandung in general. Thermal comfort is influenced by several parameters, some of which are temperature, humidity, speed, air, radiation, as well as metabolic rate. user.

The research method used in this study is a qualitative research method. In the end, from the results of quantitative analysis, it will be concluded that the distribution of air displacement ventilation can affect the temperature and humidity in the room so that it can support thermal comfort. This study is expected to be a reference when applying this type of air distribution for indoor laboratory applications.

keywords: displacement ventilation, thermal comfort