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Indoor air quality in municipality schools in Mumbai

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Indoor Air Quality (IAQ) refers to the air quality within the building structures. Indoor air comprises of a mixture of the indoor micro-environment already present and the contaminated outdoor air infiltration. IAQ is essential for human health because we spend nearly 70% of our time indoors and thereby we are frequently exposed to indoor air pollutants. These pollutants arise from activities, products and materials that we use every day. Depending on the type of contaminant, IAQ can lead to a number adverse health effects. Children and aged are more vulnerable to the consequences of poor IAQ as they spend maximum time indoors. IAQ is particularly important at schools because children spend most of their time (6 to 8 hours per weekday) at school. A study was designed to determine SO2, NO2, NH3, H2S, PM10, PM2.5 concentrations and temperature and relative humidity in three schools of Mumbai. The schools selected are municipal schools of G ward in South Mumbai. These schools are situated close to main roads and are liable to get more outdoor air in their indoor environment. It was observed that in absence of indoor source of pollution outdoor concentrations were higher than that observed indoors thereby indicating near 100% ventilation in the municipal schools. The problem of IAQ in schools needs to be addressed in order to ensure the safety of students and staff members.

Biography

Namrata Rasal is studying MTech Environmental Engineering at National Institute of Technology Warangal. She is presently undergoing training at CSIR- National Environmental Engineering Research Institute (NEERI) and working in Air Pollution Projects. She has presented 2 papers at an international conference and published a paper in a reputed journal.

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