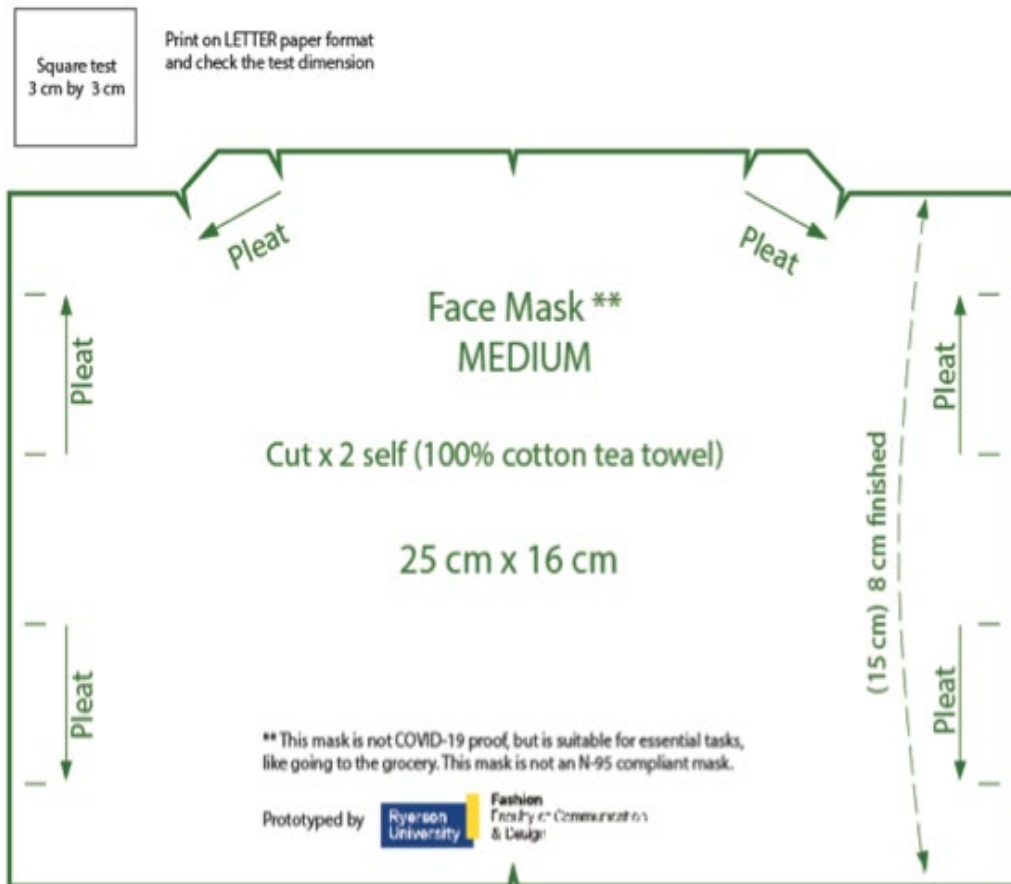
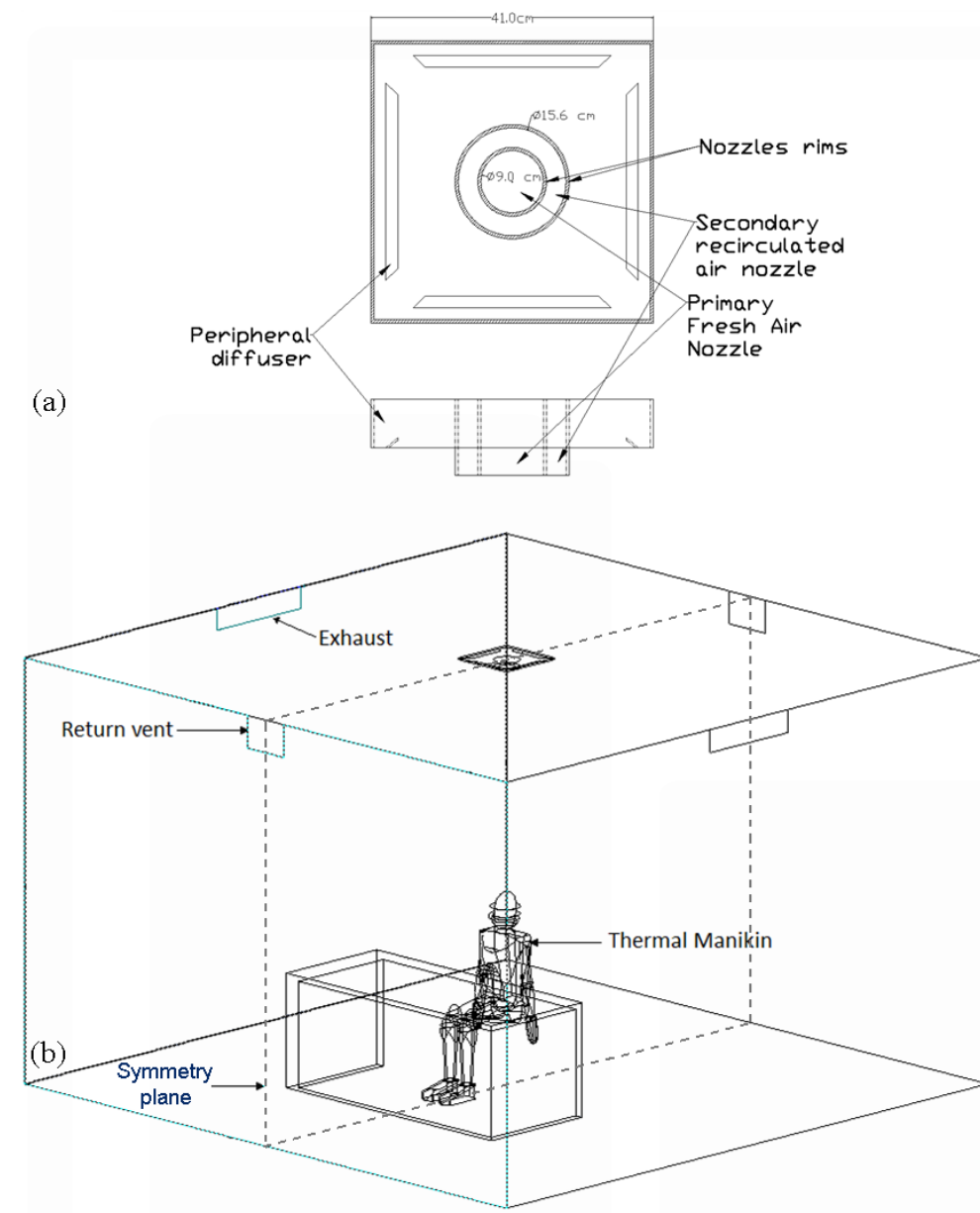


Cough droplet dispersion (a) into ambient, (b) when a surgical mask is worn, and (c) when an N95 mask is worn.

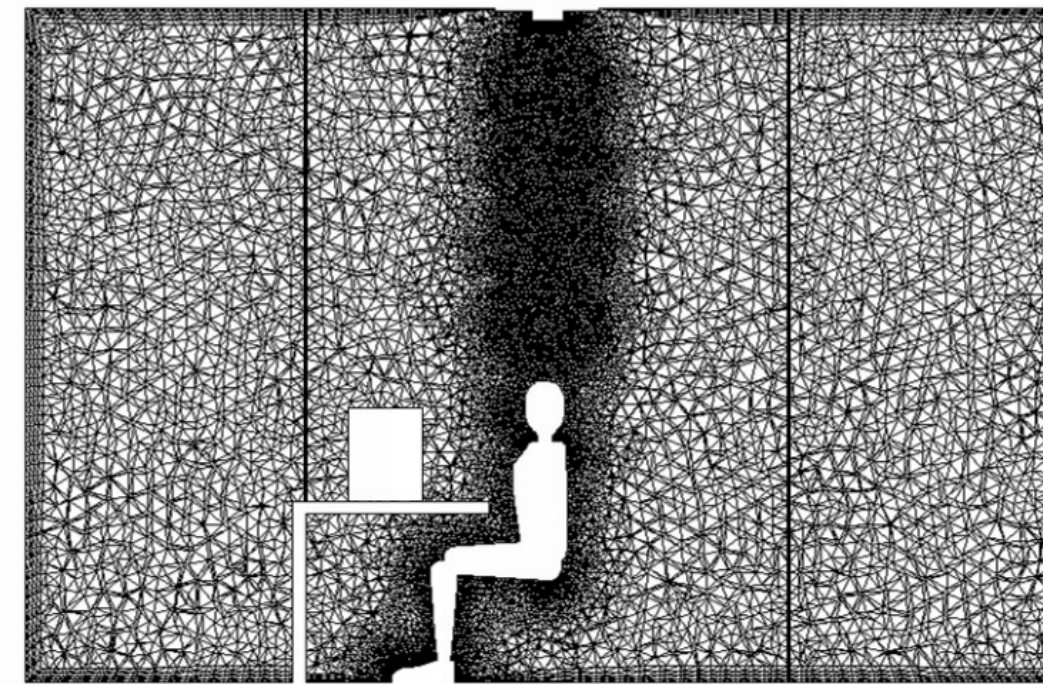


Sample mask pattern

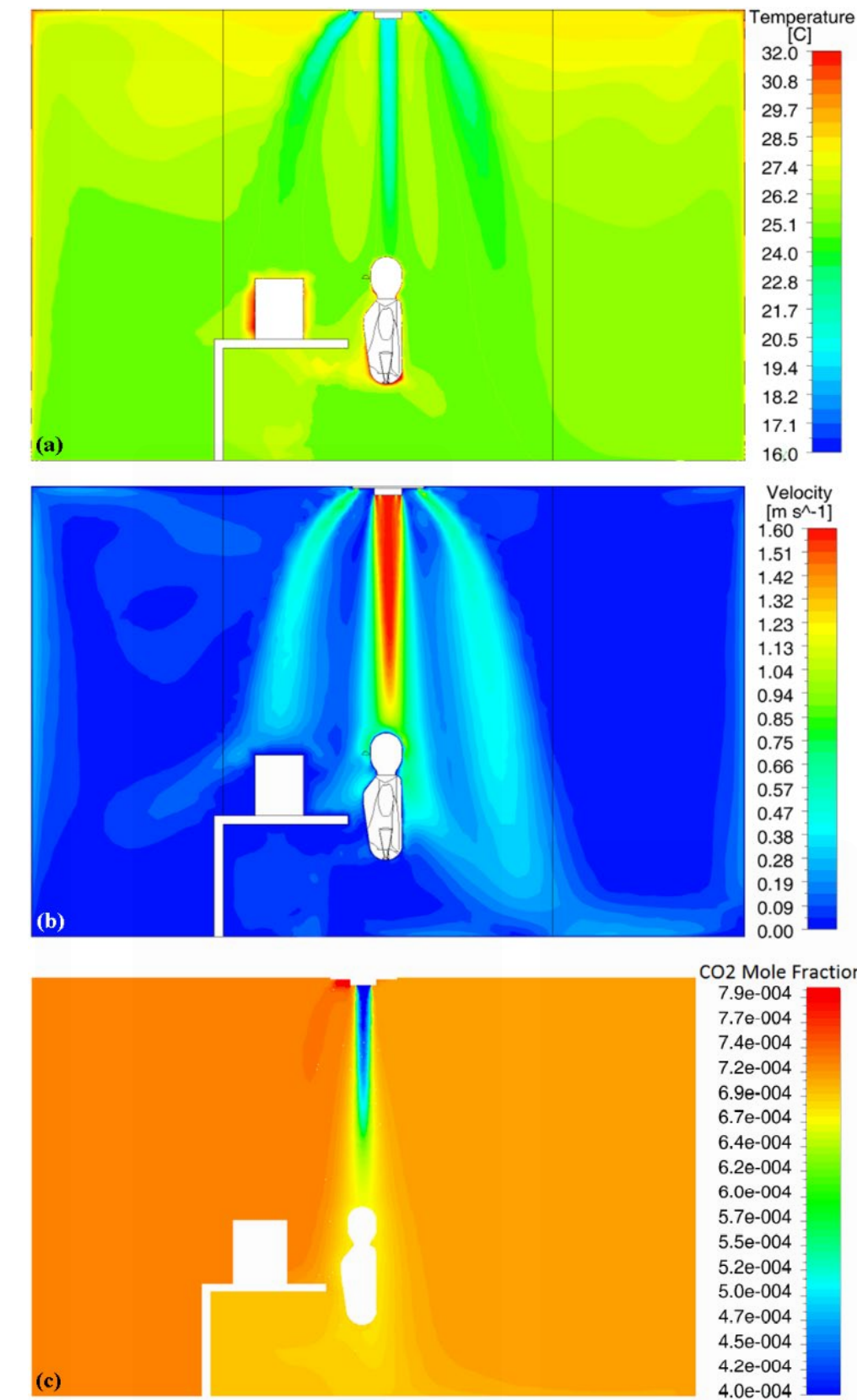
Relevant Computational Modelling Completed



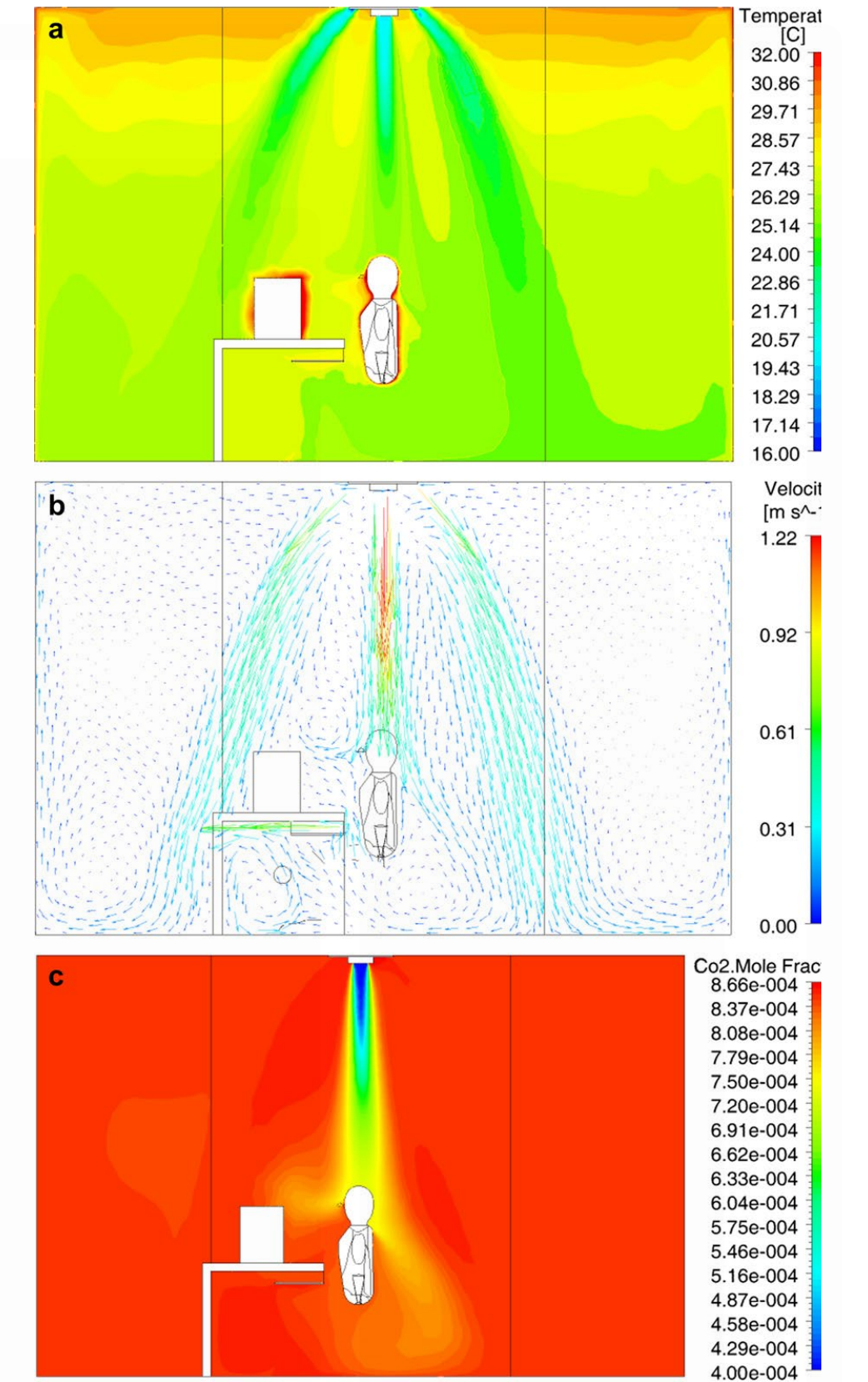
(a) Frontal and top views of the proposed ceiling Personalized Ventilation (PV) nozzle and (b) computational domain.



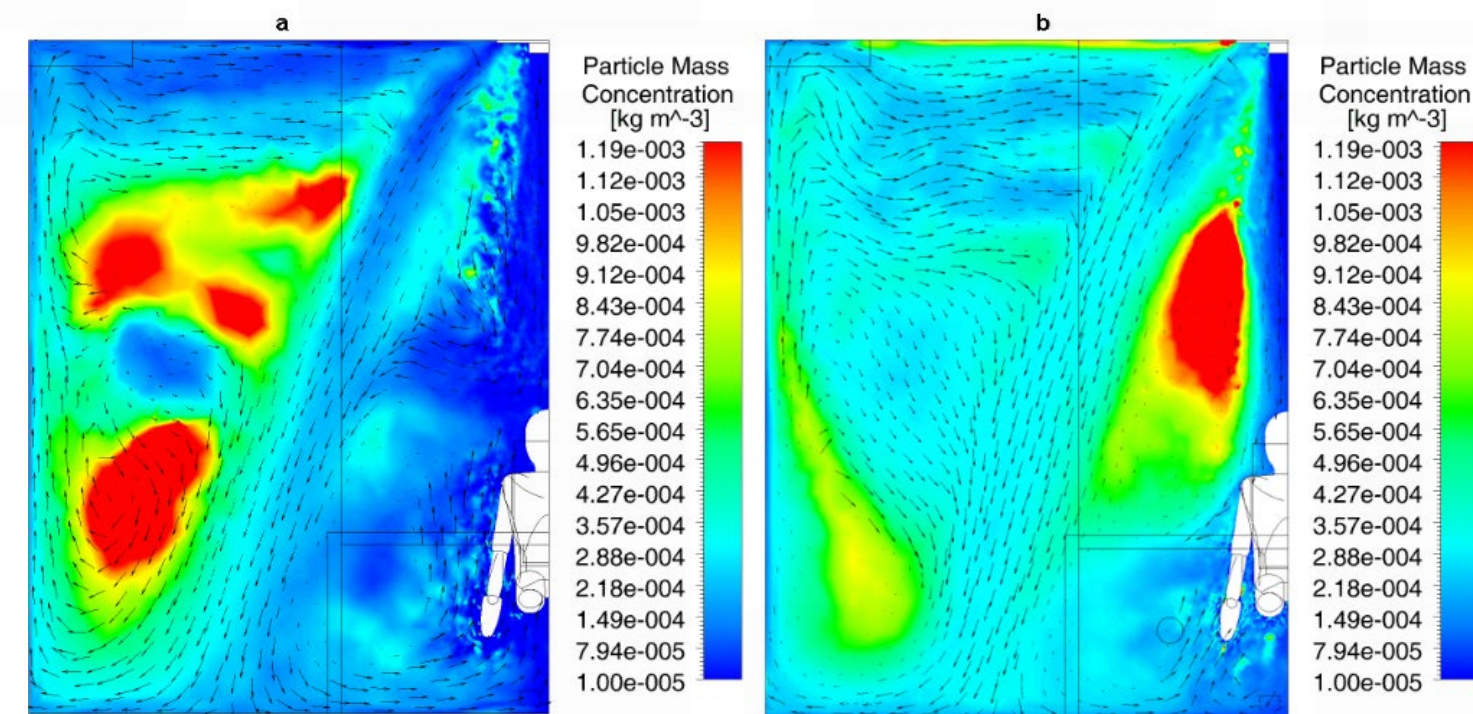
Generated grid at the symmetry plane.



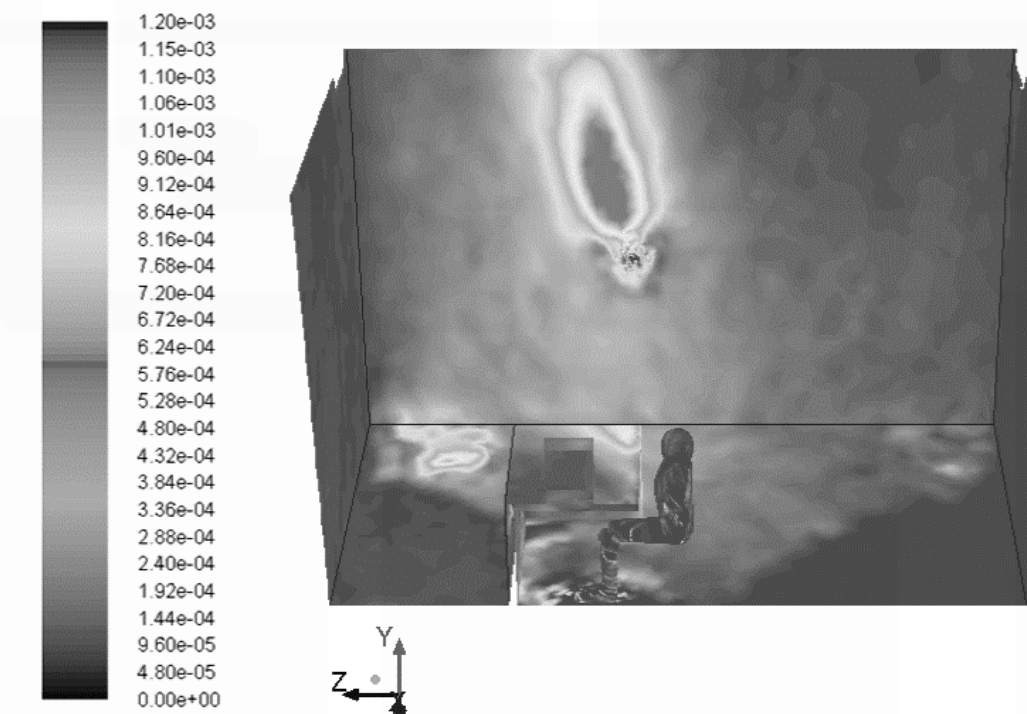
(a) Temperature, (b) velocity, and (c) CO₂ contours for the vertical jet with 10 L/s fresh air flow rate and 26°C macroclimate temperature.



(a) Temperature, (b) velocity, and (c) CO₂ contours for the vertical jet with 7.5 L/s fresh air flow rate supplied at 20°C with a macroclimate temperature of 27°C.



Particle concentration and velocity vectors at the XY midplane for (a) particles of 1 μm size and (b) particles of 0.01 μm size/



Particles mass concentration contours (kg/m³) at the solid surfaces obtained using source S1 for particles of 1 μm size.