

A new visor with aerodynamic sealing to protect medical professionals from contaminated droplets and aerosols





## Framework

The fast spreading of the SARS-CoV-2 virus led to a great demand for personal protective equipment (PPE). Healthcare professionals, mainly dentists, work close to the patients, increasing their risk of infection. This work investigates the protection efficacy of a newly designed visor provided with an air curtain to seal the breathing zone. This PPE was developed by computational fluid dynamics (CFD) modeling. Results show that the aerodynamic sealing in this PPE device effectively protects the user's face from a contaminated environment.

