

Analysis of the possibility to utilize an “active” protection system within personal protection equipment

This bachelor thesis explores the possibility of utilizing active systems within PPE (personal protection equipment), more specifically mouth masks. The current and traditional filtering mouth masks do not affect the infectiousness of a virus and are thus considered a passive system for this thesis. Active systems have the benefit of augmenting protection, lowering the possibility of re-aerosolizing the virus and making a re-usable system. During this thesis a multitude of methods have been considered and have resulted in two viable options for an active system. A system based on electricity and a system based on UV light. The **electric** system is based on the research published by Vomaris