GUMS: Growth Unit for Mushrooms in Space is an ingenious mushroom growing hybrid system consisting of an electromagnetically treated homogeniser for nutrient mixing and solution sanitising and hydroponic porous ceramic tubes for the nutrient delivery and recycling. The growing environment will be monitored via an autonomous sensor system, which transmits the air sensing (air temperature, relative humidity, light intensity) and water sensing (solution temperature, pH, electrical conductivity, concentration of nutrients) data to a mobile app.