

## W5 – Materials for a sustainable future

Subgroup 1– Problem Solving

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As we are living in these times of the pandemic, we as designers more than ever are pushed to think how can we improve the space around us by making it healthier and safer.

So our main topic of discussion is what materials can be used to make spaces healthier?

### 3 Main Categories of our research:

Touchable Surfaces (anti-bacterial protective coatings)

Air Quality through filters

Disinfection lighting (UVC) / sanitizing methods (cleansers & footbath mats)

### 1st Case Study HEALTH CARE FACILITIES (public or private)

Location : ANIMUS Rehabilitation Center, Larissa, Greece

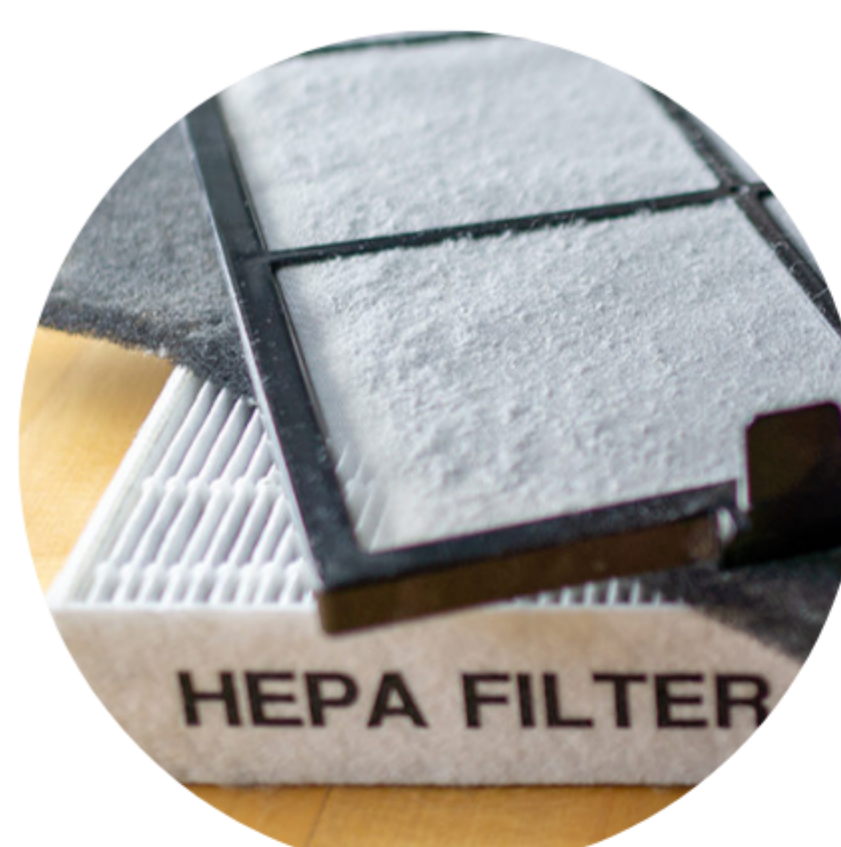
Hospital circulation Corridor



Hospital Patient's room



Copper tray tables



Hepa filter air quality



Copper bedside rails



Copper bedside armrests



Disinfection lighting (UVC)



Copper door handles



Copper handlebar

#### ANTIBACTERIAL SURFACES & SANITIZING METHODS

The aim of Group 1 of our workshop (W5) is to search solutions in protecting Public Health through our field of knowledge:

DESIGN and MATERIAL Technology.

We focus on Health Care Facilities where people are more vulnerable and on Public Transportation, where crowds of people move in daily life.

### 2nd Case Study

#### PUBLIC TRANSPORTATION

Location : Athens, Greece

Working on three main categories we explored ideas for:

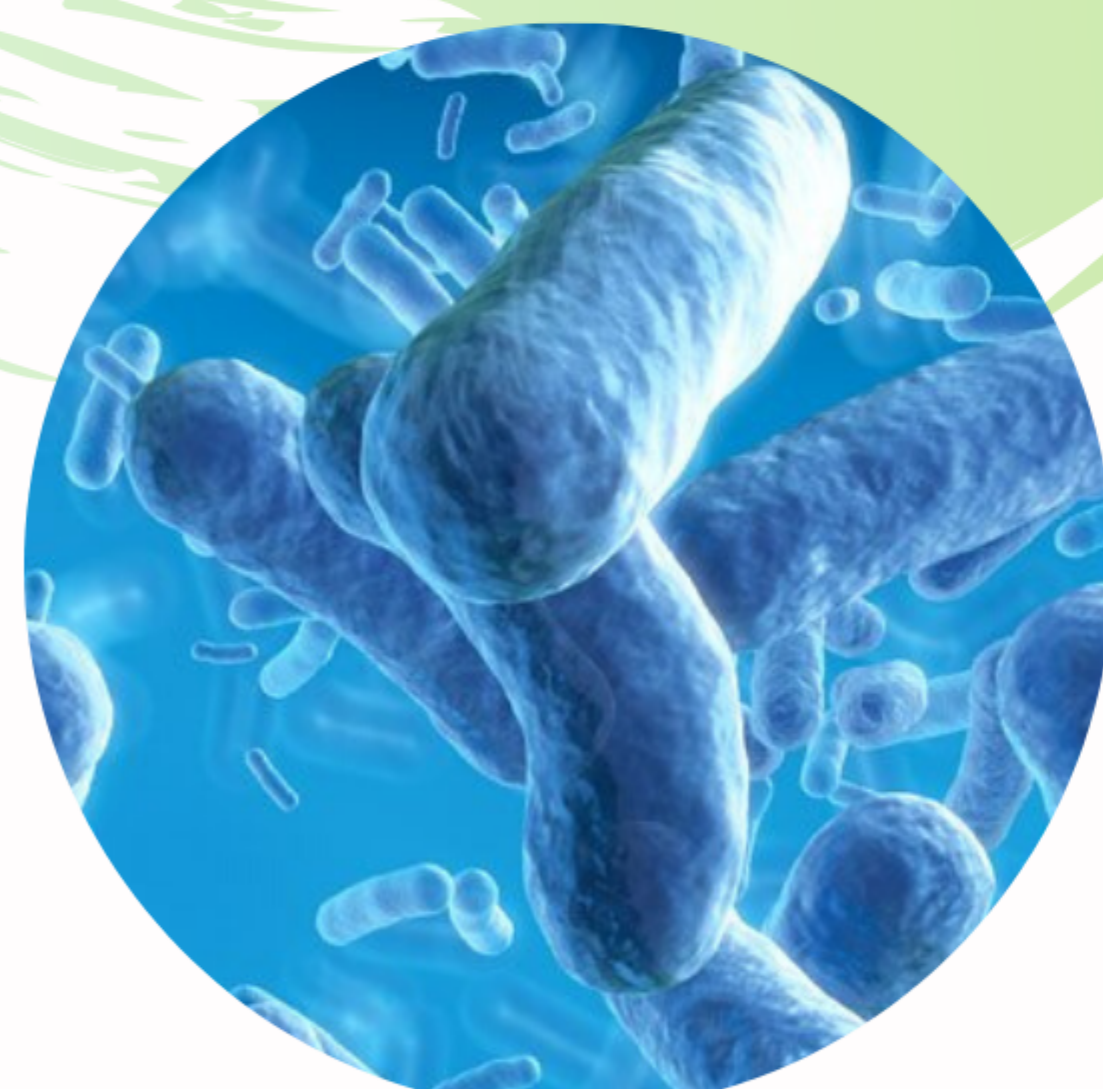
1. protecting commonly- used surfaces (such as door handles, handlebars, bedside tables e.t.c.) with copper coatings or antimicrobial thin membranes with self-cleaning properties (using nanotechnology)
2. improving indoor air quality through true HEPA filters in air ducts of the HVAC systems and air purifiers machines
3. sanitizing with disinfection lightings (germicidal UVS devices).



Tram Station



Non-absorbent surfaces



Antimicrobial coating



Non-absorbent surfaces



Non-absorbent surfaces



Metro Vagon



Nano Septic Surfaces

Human friendly materials

Sanitizing

Self cleaning surfaces