

MATERIALS AND STRUCTURES SYMPOSIUM (C2)
Specialised Technologies, Including Nanotechnology (8)

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THE USE OF COLOR TECHNOLOGY TO SUPPORT ORIENTATION IN SPACE HABITAT

Abstract

Among the many differences that extra-atmospheric environment displays regarding to terrestrial one, microgravity is what mainly conditions human being life, because it influences the way of space perceiving and of acting inside of it. Moving inside a Space module in lack of gravity can cause astronaut's disorientation because the six surfaces are indifferent to each other for into the Space doesn't exist, as on Earth, a prevalent direction of positioning generated by gravity: a strategy to avoid that a Space Station becomes a labyrinth, within which proves to be undistinguishable the floor from the ceiling and the right wall from the left one, is use of colour to characterize different surfaces. Given the importance that colour has in human life, as in psychology area for its capability of conditioning moods and behaviours, as in physiology area because affecting circadian rhythm, the use of colour in the interior design requires a particular attention. The characterization of an architectonic space with colour is a theme that must be from time to time under study, depending on the environment use: the Space module interior, in addition to the specific intended use, has special features such, caused by microgravity and by confinement, that required much attention and an additional study in projecting stage. In particular a correct colour project can contribute to simplify astronaut's mobility and orientation into module, as well as to create the conditions for opposing against some psychological problems that occur during missions.