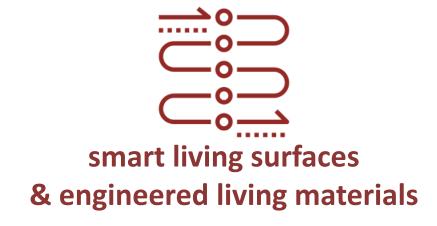
Bioinspired living skin for architecture

ARCHI-SKIN innovative aspects and challenges





in-situ methodology & prototypes

Image: BioremediationImage: Coatings on different substrates
in diverse climates& self-healingin diverse climates



"Logic will get you from A to B. Imagination will take you anywhere" A. Einstein









impregnated
&
functionalized
subsurface
+ additives
biological porous
wood inorganic porous
metal/plastic

EPS matrix

impregnation

• • additive

living biofilm + additives

substrate



"Logic will get you from A to B. Imagination will take you anywhere" A. Einstein

spore

∼ hyphae



 $\sim \sim \bigcirc$ carbon source

How does ERC influence my research?



Interdisciplinary approach and consolidation of research



Engineered Living Materials Laboratory



A new direction of materials engineering

Anna Sandak (2023) Engineered living materials for sustainable and resilient architecture, Nature Reviews Materials DOI:10.1038/s41578-023-00554-0



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ARCHI-SKIN impact



New understanding of biological systems



Monitoring dynamic living systems in-situ 🗧



Outstanding service life performance

Lowering air pollution by bioremediation



engineered living materials interacting adapting and responding to environmental changes





"Logic will get you from A to B. Imagination will take you anywhere" A. Einstein

