

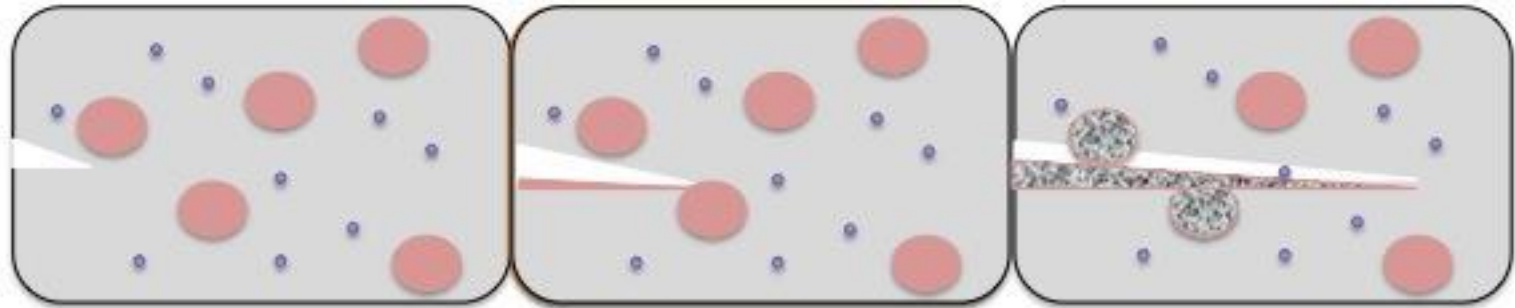
# Living MPGDs

Self-healing materials for MPGDs

# Self-healing materials

- Living beings have the property of self-healing or self-repairing. Since a decade, materials are developed that can repair themselves.
- Various techniques are used : nanotubes or capsules containing liquid monomers and catalysts. When broken, they mix and produce polymers.
- GEMs are often broken by carbonization after a traversing spark. Suitable monomers and catalysts could be liberated, 'healing' the short.

# An example of self-healing



Depiction of crack propagation through microcapsule-embedded material. Monomer microcapsules are represented by pink circles and catalyst is shown by purple dots.