

# MUST

## Multi-level protection of materials for vehicles by “smart” nanocontainers

### Objectives

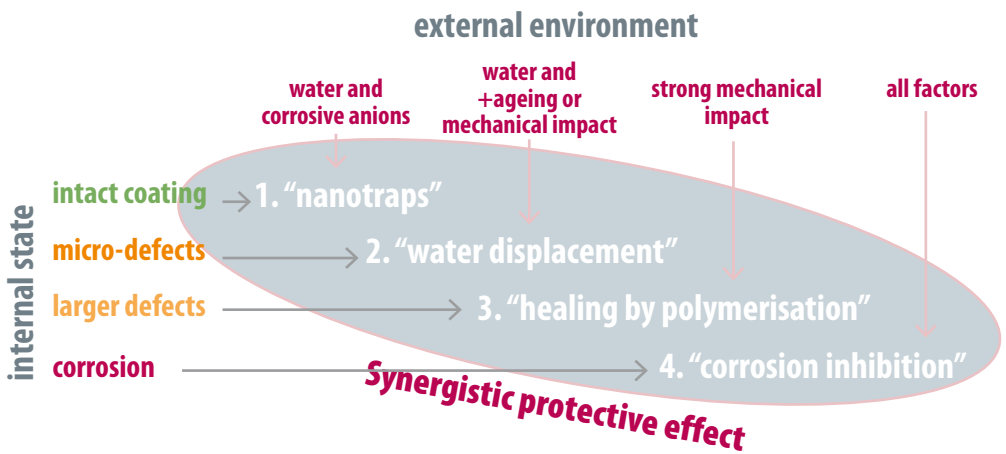
The automotive coating is a complicated system which needs multi-stage deposition and consumes a lot of energy releasing high amount of wastes.

There are still concerns of automotive producers on anti-corrosion protection of current coating systems especially on cut edges and in hollow structures.

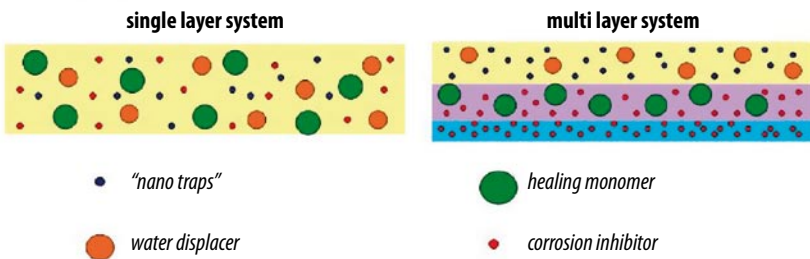
Therefore the automotive industry is looking for new technologies which could require:

- less deposition steps;
- reduction of VOC generation
- lower coating thickness ensuring the same or even better corrosion protection
- providing proper adhesion properties
- improved performance in critical zones.

### Project Approach



- Active feed-back of the coatings depends on the internal state of the coating system and the external environmental conditions
- Different levels of active protection are working as response to different impacts



### Organisational Information

Budget	10.53 M€	Funding	7.14 M€
Duration	48 months	Start	June 2008
DG	Research	Priority Area	Sustainable Surface Transport
Coordinator	EADS	Contact	Theo Hack
Partners	Bayer, Chemetall, Daimler, EADS, FIAT, ICSC (Institute of Catalysis and Surface Chemistry), IST (Istituto Superior Tecnico), KMM-VIN (European Virtual Institute on Knowledge-based Multifunctional Materials), Mankiewicz, MPI, NCSR (National Research Center for Scientific Research), R-TECH (Steinbeis Advanced Risk Technologies), Re-Turn AS, SIKA, SINTEF, University of Aveiro, University of Helsinki, University of Paderborn, Varnish		