



Innovative anti-graffiti product for application in the Cultural Heritage of Europe

EFFACEUR

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EUROPEAN CONSTRUCTION TECHNOLOGY PLATFORM



PROBLEM TO BE SOLVED

- Many Cultural Heritage objects are attacked by graffiti
- Graffiti cleaning costs Europe nearly 90M€/year
- Anti-graffiti protection: none of the coatings currently available on the market presents the necessary characteristics for Cultural Heritage materials



PROBLEM TO BE SOLVED



- Need to develop urgently efficient anti-graffiti products for their application in Cultural Heritage
- However, SMEs often lack of the necessary R&D infrastructures
- Besides, the financial risk is high
- European SMEs urgently need innovative technology to produce an anti-graffiti product which fulfils the requirements of the Cultural Heritage market

EFFACEUR OBJECTIVES

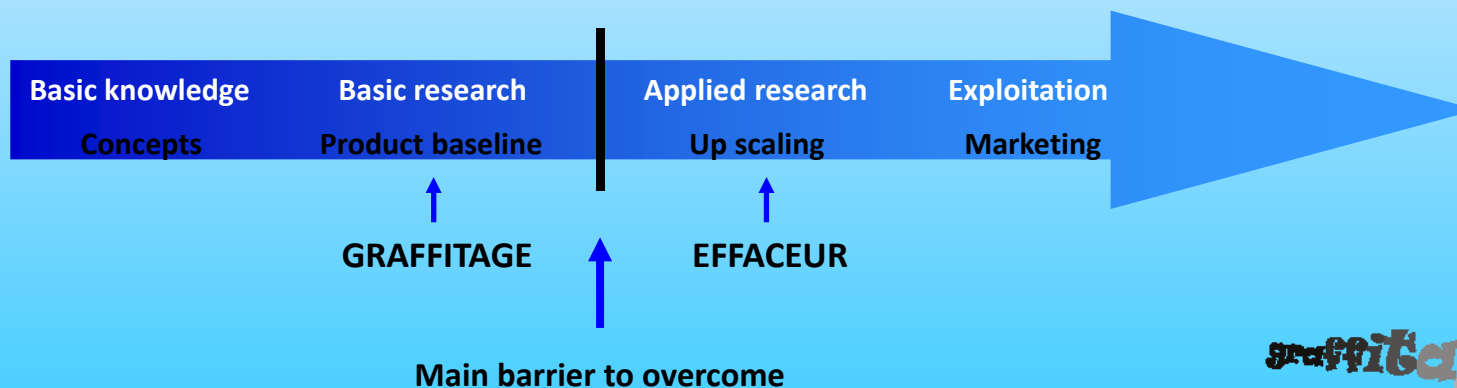


- To develop a novel **industrial anti-graffiti formulation** and its associated **production process**
- To develop the most adequate application method
- To develop a specific graffiti cleaning procedure for this anti-graffiti product
- To validate the behaviour and suitability of the new product in 5 case studies



GRAFFITAGE & EFFACEUR

- **GRAFFITAGE EU project: development of a new anti-graffiti formulation for Cultural Heritage (anti-graffiti prototype)**
- **The project attracted much attention of many SMEs worldwide**



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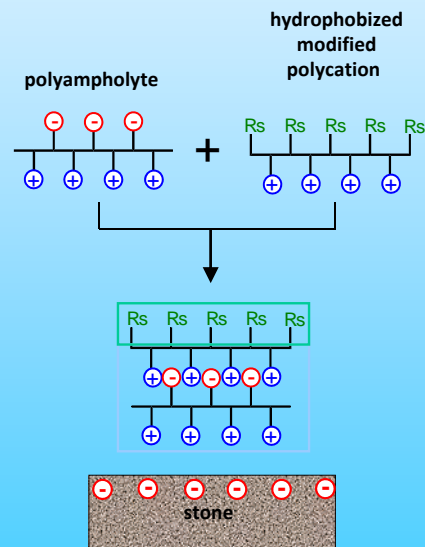
OPPORTUNITY FOR SMEs

- In EFFACEUR SMEs will outsource research activities to RTD institutes
- EFFACEUR is a clear opportunity for SMEs involved in the field to increase their competitiveness and benefit in Europe by designing, distributing, marketing and applying new anti-graffiti coatings for Cultural Heritage application



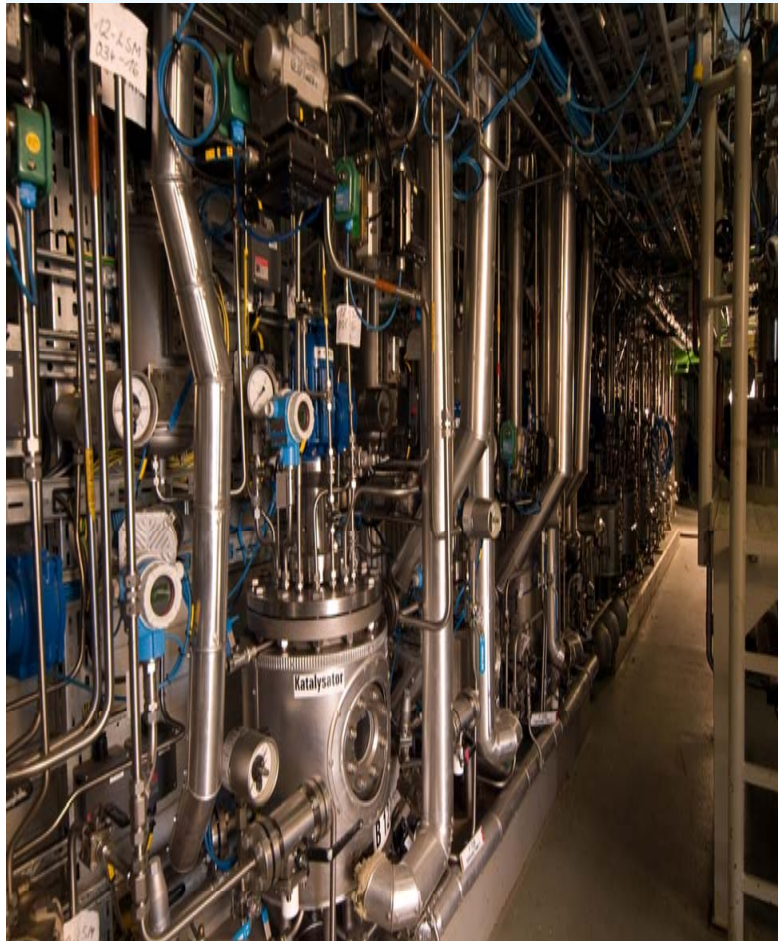
EFFACEUR INNOVATIVE SOLUTION

- Aqueous formulation containing 2 polymeric components which form a pH-sensitive complex when applied onto a porous substrate



hydrophobically modified polymeric charge complex

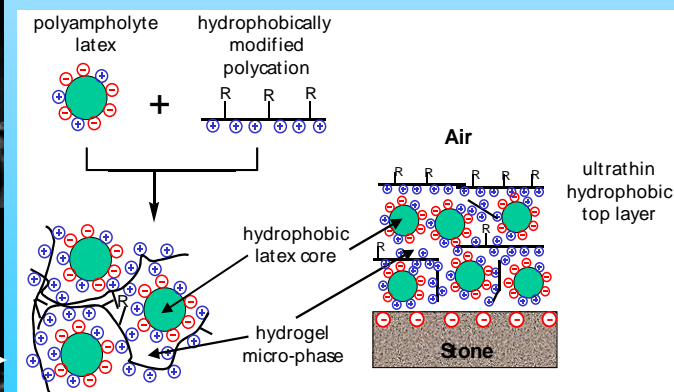




- **Properties of the new anti-graffiti formulation:**
 - ✓ **Hydrophobicity**
 - ✓ **Good adhesion to substrates of different porosity**
 - ✓ **Low colour and gloss variations after application**
 - ✓ **Improved water vapour permeability and drying behaviour in comparison to current commercial products**
 - ✓ **Resistance to natural weathering**
 - ✓ **Reversible but resistant to cleaning agents**
 - ✓ **Good cleaning efficiency**
 - ✓ **Environmentally friendly (based on an aqueous emulsion)**

IMPACTS OF EFFACEUR

- The successful market transfer of the anti-graffiti product will stimulate and enhance the whole Cultural Heritage sector
- Research results will enter the Cultural Heritage market
- This will motivate other SMEs to use previous research results to develop a marketable product





IMPACTS OF EFFACEUR

- **EFFACEUR will contribute to the requests from the European Parliament that money for research needs to be converted into money generated by markets**
- **Important for the European Commission to increase visibility for successful Cultural Heritage research and to reach Lisbon goal of a knowledge-based society**
- **Help to stay Europe N° 1 in Cultural Heritage research by offering high-tech products and services to the rest of the world**



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PROJECT DETAILS



Project acronym: EFFACEUR

Contract number: 262486

Duration: 24 months (1/1/2011 – 31/12/2012)

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Thank you very much for your attention.



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