

# Coated Micro and Nano Structured Surfaces with Tailored Mechanical and Physical Properties (C-Surf)

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- **Accredited Centre of Excellence**
- **Coordination during FP6 – IST & NMP:**
  - 2 NoEs, 2 STREPs
- **Partnership during FP6 – IST & NMP:**
  - 3 IPs, 3 STREPs, 2 CAs, 1 SSA
- **Over €12.5 million EU funding since 2003**
- **Relevant projects include**
  - MicroBridge
  - CHARPAN
  - LAUNCH-MICRO

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# C-Surf

The research will focus simultaneously on studying and optimising surface/interface effects of nanocoatings applied on micro and nano-structured surfaces, and designing corresponding processing technologies for developing multifunctional surfaces with tailored properties and predictable performance

## Objectives

- Creating nano-reinforced surfaces with tailored mechanical and physical properties
- Design processing technologies for applying nanostructured coatings on large area surfaces by combining the capabilities of novel nanocoating processes with those of high throughput technologies for micro and nano structuring (mass fabrication)
- Develop technology demonstrators

# Relevance to the Call

- **NMP-2007-2.1-2 : Nanostructured coatings and thin films**
  - “The advent of nanotechnology has enabled tailoring the structure of coatings and films at the nanoscale, subsequently producing a radical enhancement of their performance “
  - “The projects should consider the development of novel nanostructured coatings and thin films with markedly enhanced properties such as high hardness, chemical inertness..”

## Scale

- Duration: 3 years
- Budget: ~ €3million (small & medium scale)
- Consortium: 6 - 8 partners

- **Additional expertise required:**
  - Nano-coatings characterisation
  - Large area nano structuring/coating
  - End users
    - Technology demonstrators
    - Mass production transfer

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