## PRESS RELEASE



## Innovative products

## The immobilized gemini surfactants:

Surfactants, i.e. surface active agents, rank among the most important chemical compounds. Surfactants play a crucial role in the production of household chemicals, the industry, hightech sector, molecular biology and nanomedicine. High consumption of surfactants that globally exceeds ten million tons a year inspired us to undertake research into new surface active agents whose application would ensure the same cleaning and biocidal effect, but lessen the consumption of surfactants. The result of our research are multifunctional gemini surfactants.

Gemini surfactants:

- excellent surface active performance
- excellent emulsifying and dispersing properties
- increased antimicrobial potential
- unlimited modification capacity
- a high potential for corrosion prevention

## Impact:

1. The smart materials with immobilized gemini surfactants allow to control the population of microorganisms to get microbiologically safe environment in food industry, hospitals and social places.

2. The very high biocidal activity of gemini surfactants at very low concentrations allow to use them in hundreds times lower amounts in comparison to conventional disinfectants to get the same biocidal effect. This is a base of greenolution idea.

Our immobilized gemini surfactants took part in "Amsterdam Innovation Award" contest.