

Centre for alternative environment friendly high effective polymer antimicrobial agents for industrial applications

Project co-funded in the operational programme “Competence Centres”, of TACR supporting the development of long-term cooperation in research, development and innovation between the public and private sectors.

www.alterbio.eu

- **Innovative antimicrobial systems** R&D and proposed commercialization
- **Safety:** Antimicrobial agents strongly attached to polymeric systems without leaching to the environment.
- **Ecofriendly:** Long-term protection of treated materials against microbial attack without undesirable health and ecological effects.



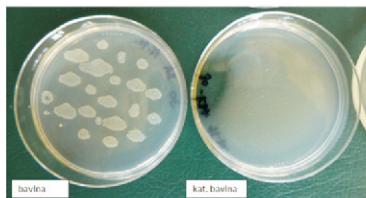
PLASTICS AND VARNISHES

TEXTILES

COSMETICS

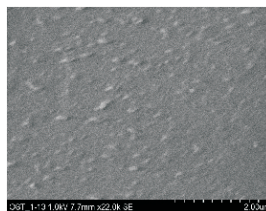
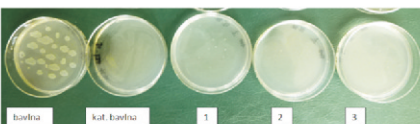
Main activities:

- Selection and synthesis of polymerizable antimicrobial agents
- Incorporation of antimicrobial agents into polymeric structures
- Master-batch formulation
- Application in plastics and varnishes
- Antimicrobial agents for cosmetics
- Textile applications
- Health safety and antimicrobial efficiency assessment



COC
Antimicrobial activity test
(E.Coli)

100% reduction



**Polymers with antimicrobial activity
with firmly anchored active components:**

- Phthalocyanine photosensitisers
- AgNPs



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