

Abstract

Trends in Hybrid Nanocoatings [†]

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[†] Presented at the 15th International Symposium “Priorities of Chemistry for a Sustainable Development” PRIOCHEM, Bucharest, Romania, 30 October–1 November 2019.

Published: 15 October 2019

Keywords: coatings; metallic nanoparticles; inorganic nanoparticles; antimicrobial; environmentally friendly synthesis; plant extract

The aim of the present work was to prepare intelligent materials for coatings with advanced protection properties against development of biofilms and deposition on stone, paper and metal surfaces.

Coatings based on metallic and/or inorganic nanoparticles were prepared by sol-gel process and via supercritical CO₂ in order to achieve manufacturing processes with minimum energy consumption and the least polluting.

The obtained materials were tested both in terms of antibacterial properties, as well as structurally (FTIR, XRD) and morphologically (SEM, TEM).

Acknowledgements: This work was supported by a grant of the Romanian Ministry of Research and Innovation, CCCDI—UEFISCDI, project number PN-III-P1-1.2-PCCDI-2017-0428, contract 40PCCDI/2018, within PNCDI III and by Romanian Ministry of Research and Innovation -MCI through INCDCP ICECHIM Bucharest 2019–2022 Core Program PN. 19.23—Chem-Ergent, Project No. 19.23.02.01.



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