



Conducător de doctorat: Prof. dr. Simona PÎNZARU

Nr. locuri la doctorat: 1

Loc 1/1 – bugetat, cu bursă (sesiunea iulie)

Membrii comisiei de admitere:

1. Prof. Dr. Simona Pinzaru
2. Prof. Dr. Vasile Chis
3. CS I Dr. Alina Magdas

Tematică pentru examenul scris:

1. Development of multifunctional biomaterials from sustainable sources within the bioeconomy framework and assessment of their impact in aquatic ecosystems.
2. Silver nanoparticles fate within aquatic environmental biochemistry: As most intensively used AgNPs particularly for developing trace SERS detection routes, the fate of AgNPs - aquatic microorganisms interface is of ecotoxicology broaden interest. Vibrational techniques to characterize AgNPs–aquatic microorganisms interface will be developed in conjunction with complementary methods.

Tematică pentru interviu:

1. Composition and morphology of ultrastructured biogenic materials of aquatic origin and their potential for developing new, smart materials and extract biomolecules;
2. Sustainable biopolymers obtained from biogenic waste
3. Unveiling the versatility of Raman technology for real-time process control, to develop new active ingredients for improved bioavailability of pharmaceuticals and new biomaterials.

Bibliografie

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2. Pînzaru SC, Poplăcean I-C, Maškarić K, Dumitru D-A, Barbu-Tudoran L, Tămaș T-L, Nekvapil F, Neculai B. Raman Technology for Process Control: Waste Shell Demineralization for Producing Transparent Polymer Foils Reinforced with Natural Antioxidants and Calcium Acetate By-Products. Processes. 2024; 12(4):832. <https://doi.org/10.3390/pr12040832>
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Data, ora și locul examenului: 22 iulie 2024, 13.00, sala "Hermann Oberth", UBB Cluj