ΠΑΝΕΠΙΣΤΗΜΙΟ UNIVERSITY OF CRETE



ΚΡΗΤΗΣ

ΤΜΗΜΑ ΕΠΙΣΤΗΜΗΣ ΚΑΙ ΤΕΧΝΟΛΟΓΙΑΣ ΥΛΙΚΩΝ

DEPARTMENT OF MATERIALS SCIENCE AND TECHNOLOGY

Ηράκλειο 19/10/2021

Η ΠΑΡΟΥΣΙΑΣΗ ΛΙΠΛΩΜΑΤΙΚΗΣ ΕΡΓΑΣΙΑΣ

Της φοιτήτριας Μπούση Γιονίντα, θα γίνει τη

<u>Παρασκευή 22/10/2021</u> και ώρα 11:00

στην Β2 του Κτιρίου Χημείας

Θέμα Διπλωματικής:

«Protein-polymer conjugates for drug delivery applications»

Για την παρακολούθηση της παρουσίασης δια ζώσης, το κοινό θα πρέπει να έχει τα απαραίτητα δικαιολογητικά (πιστοποιητικό εμβολιασμού, νόσησης ή rapid test).

Abstract:

Protein-polymer conjugates are hybrid biomaterials that consist of one or more synthetic polymers covalently linked to a protein, and present enhanced properties as compared to the parent protein including improved stability, biocompatibility and solubility. These characteristics make bioconjugates ideal molecules with various industrial applications, such as molecular sensors, switches or drug delivery systems. In the Laboratory of Synthetic Biomaterials, an extensive literature review is under preparation, aiming to give an overview of current synthetic protocols and application of bioconjugates as drug delivery systems or nanoreactors, and the role of their self-assembly in these applications covering literature after 2018. The purpose of this thesis is to focus on the applications of protein-polymer conjugates in controlled-release drug delivery systems (DDS). All the studies reporting the use of bioconjugates as drug delivery platforms, enabling temporal and/or partial control of drug release will be included in this thesis. Materials with specific properties for extended applications, especially in the medical field will also be discussed. Summarizing all the reported studies and giving the main points, the goal of this thesis is to review the recent advances in the synthesis of DDS.

ΑΠΟ ΤΗ ΓΡΑΜΜΑΤΕΙΑ

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