<u>ΑΝΑΚΟΙΝΩΣΗ</u>

ΠΑΡΟΥΣΙΑΣΗ ΔΙΠΛΩΜΑΤΙΚΗΣ ΕΡΓΑΣΙΑΣ

Της Φοιτήτριας Μαρία Παπαγεωργίου, θα γίνει τη

Τρίτη 15/10/2019 και ώρα **12:00**

στην αίθουσα Β2 του Κτιρίου Χημείας.

Θέμα Διπλωματικής:

«Examining the interactions between responsive nanocarriers and cancer cells»

Περίληψη

The aim of this thesis was to create an initial, responsive drug delivery model carrier, in order to examine the interactions between the carrier- composed of a pH-responsive biohybrid- and cancer cells, with prospect of its use towards targeted drug delivery to treat lysosomal disorders. In order to achieve that, a pH-responsive biopolymer was synthesized via RDRP without deoxygenation and the products were characterized via polyacrylamide gel electrophoresis and size exclusion chromatography. The response of corresponding biohybrid to pH changes was studied and its critical pH point was determined via ultraviolet-visible spectrophotometry. Furthermore, the toxicity of the particles was determined by the MTT assay, which is a colorimetric assay for assessing cell metabolic activity. Finally, the internalization process of the nanocarriers, as well as, their movement and interaction with organelles inside the cells were studied via confocal microscopy.

ΑΠΟ ΤΗ ΓΡΑΜΜΑΤΕΙΑ