

**Πρόσκληση σε Δημόσια Παρουσίαση της Διδακτορικής Διατριβής του  
κ. Graziano Daniele Deidda**

(Σύμφωνα με το άρθρο 12 του Ν. 2083/92)

Την Παρασκευή 23 Μαρτίου 2018 και ώρα 10:00

στην αίθουσα τηλεεκπαίδευσης E130 στο κτήριο Μαθηματικών και  
Εφαρμοσμένων Μαθηματικών, Πανεπιστήμιο Κρήτης

θα γίνει η δημόσια παρουσίαση και υποστήριξη της Διδακτορικής Διατριβής  
του υποψήφιου διδάκτορα του Τμήματος Επιστήμης και Τεχνολογίας Υλικών

κ. Graziano Daniele Deidda με θέμα:

**«Αυτοοργανωμένα Πεπτίδια και Χρήσεις τους στην Ιστοτεχνολογία»**

**“Self-Assembling Peptides and their Applications in Tissue  
Engineering”**

**Abstract:**

Self-assembling (S.A.) peptide scaffolds for tissue engineering are a timely topic in materials science and many new avenues still need to be explored. These peptide motifs convey self-organization and through conferring further functionalities, they could offer advantages that complex native extracellular matrices (ECMs) and other bio-inspired ECM-based polymers do not offer. The main target of this PhD work was to understand the formation process of different RGD (cell-attachment motif) S.A. peptide networks derived from the adenovirus sequence NSGAITIG and their utility in tissue engineering through the bio-construction of novel 3D in vitro culture systems.

Various approaches such as the characterization of the various S.A. substrates, the combination of such networks with a top-down approach-derived from Non-Linear Stereolithography techniques and the studies of the cell-substrate behavior are discussed. The author aims to elucidate that the findings in this work will offer a clearer understanding of several functionalized 3D structures and open a new way of applicability in the future of tissue engineering.