

## Seminars in Biotechnology BTEC 592 & BTEC 692

"Mimicking Nature for Designing Biomaterials"

## Thursday, April 7, 2022 13:30 GTU Congress Center, Red Hall Associate Professor Bora GARIPCAN

Boğaziçi University, Institute of Biomedical Engineering, İstanbul, Turkey



Bora Garipcan graduated from Hacettepe University, Department of Chemistry in 1999. He completed his MSc. Degree in Biochemistry division at the same department in 2001. He received his PhD in 2008 from Hacettepe University, Institute of Graduate and Applied Sciences Bioengineering division. He was a Postdoctoral fellow in Friedrich-Schiller University, Institute of Materials Science and Technology, Jena, Germany. He is an Associate Prof. Dr. at Institute of Biomedical Engineering, Boğaziçi University, Istanbul, Turkey. His main research areas are bioinspired and biomimetic biomaterials, nanomaterials and focused on cell-surface interactions.

## **Abstract**

The materials found in nature have many superior features and it is thought that there are many features waiting to be discovered. Since the first ages, humankind has produced/used various materials by taking examples from nature in order to make life easier. The solution to the problems of humanity by examining nature was continued with biomimetics and bioinspiration approaches. The products created as a result of these approaches were carried one step further with the help of technological developments. These approaches have been used in many areas from art to architecture, from robotics to tissue engineering. In this seminar, the scope of biomimetics and bioinspiration approaches and their use in biomedical engineering applications will be discussed in detail.