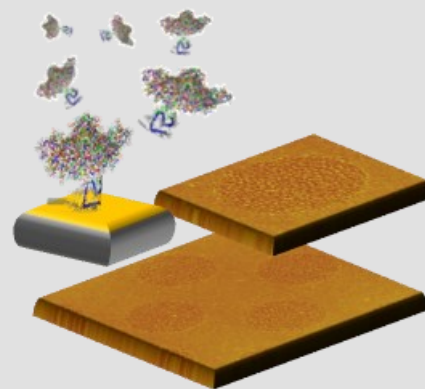


Bioenabled & Biomimetic Materials

Research:

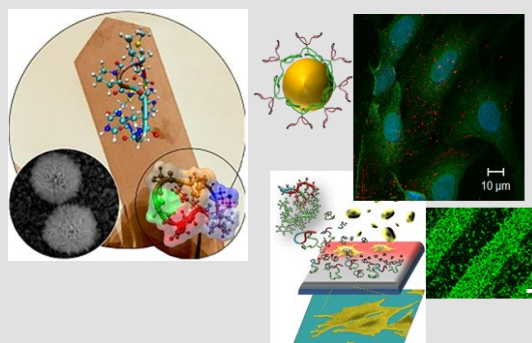
Our inspiration has been to decode the elegance contained in Nature's highly organized, yet functional structures and systems for designing bioenabled materials and systems using molecular recognition, self-assembly and self-organization principles in an integrated fashion combining experimental and computational tools.

Combining the multidisciplinary fields of molecular biology, genetic engineering and material science, we focus our research on biology enabled nanosciences and biofabrication in wide range of applications.



Funding Sources:

National Institutes of Health
National Science Foundation
University of Kansas



Selected Publications:

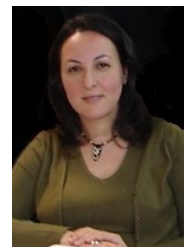
- S. Cetinel, et.al., "Addressable Self Immobilization of Lactate Dehydrogenase Across Multiple Length Scales", *Biotechnology Journal*, 8(2): 262-272 (2013).
- H. Yazici, et.al., "Biological Response on Titanium Implant Surface Functionalized with modular peptides", *ACTA Biomaterialia*, 9(2): 5341-5352 (2013)
- M. Hnilova, et.al., "Single-step Fabrication of Patterned Gold Film Array by an Engineered Multi-functional Peptide", *Journal of Colloid And Interface Science*, 365 (1) 97-102 (2012)
- C. Tamerler, M. Sarikaya, "Genetically Designed Peptide-Based Molecular Materials", *ACS NANO*, 3(7), 1606-1615, (2009)
- M. Sarikaya, C. Tamerler, et.al. "Molecular Biomimetics: nanotechnology through biology", *NATURE Materials*, 2 (9), 577-585, (2003)

Honors and Appointments:

- Visiting Professor Award 2013, Green Mobility Research Center, Nagoya University, Japan
- Turkish Academy of Science, Member, 2012
- University of Washington, MSE, GEMSEC Assistant Director, 2005-2013
- Istanbul Technical University, Molecular Biology-Biotechnology Research Center Director 2004-2010

Candan Tamerler

Wesley G. Cramer
Professor,
Mechanical Engineering; Vice
President, Bioengineering
Research Center
University of Kansas
Lawrence, KS



ctamerler@ku.edu

Go to www.bio.engr.ku.edu to learn more.