

**Title:**

Dynamic Materials Inspired by Cephalopods

**Abstract:**

Cephalopods, such as squid, octopuses, and cuttlefish, have captivated the imagination of both the general public and scientists for more than a century due to their visually stunning camouflage displays, sophisticated nervous systems, and complex behavioral patterns. Given their unique capabilities and characteristics, it is not surprising that these marine invertebrates have recently emerged as exciting models for novel materials and systems. Within this context, our laboratory has developed various cephalopod-derived and cephalopod-inspired materials with unique functionalities. Our findings hold implications for next-generation adaptive camouflage devices, sensitive bioelectronic platforms, and advanced renewable energy technologies.

**Biosketch:**

Dr. Alon Gorodetsky is an Associate Professor in the Department of Chemical and Biomolecular Engineering at the University of California, Irvine, with joint appointments in the Department of Chemistry and the Department of Materials Science and Engineering. Dr. Gorodetsky obtained B.S. degrees in Engineering Physics and Materials Science at Cornell University and a Ph.D. in Chemistry at the California Institute of Technology. He subsequently completed postdoctoral work as a National Science Foundation American Competitiveness in Chemistry Fellow at Columbia University. His current research is focused on the development of macromolecular and biomolecular materials inspired by natural systems, with an emphasis on cephalopods. His work has been featured in *Popular Science*, *Popular Mechanics*, *Newsweek*, *The Telegraph*, *Wired*, *The Verge*, *Fox News*, *NPR Marketplace*, *BBC World*, *CNN* and other popular media. For his studies, Dr. Gorodetsky has received several awards, including the Henry Samueli School of Engineering Mid-Career Faculty Excellence in Research Award, Applied Innovation