The Convergence Center for Living Multifunctional Material Systems (LiMC²)

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LiMC² is a research center established in 2020 as a partnership between Penn State University and the University of Freiburg. The mission of the center is focused on materials discovery. In particular, the research focus is to advance the science, technologies, policies, and practices needed for a sustainable world through research on engineered living materials. At Penn State, the center reaches out across the University and campuses to establish a network and community of researchers in the emerging area of living multifunctional materials. Together, members boldly and bravely explore disruptive research to make a significant and positive difference for society at large. Materials research has advanced significantly through groundbreaking work on bioinspired materials, smart, adaptive, and multi-field responsive materials, self-healing, and self-powered materials. With living multifunctional materials, researchers are seeking to combine and integrate these different aspects in a single materials system, that leverages the adaptive response, self-replicating potential, and robustness of biological systems for the programmed assembly and modulation of novel materials.