

Colloquium

Chemical Signaling and Motion for Soft Robots

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Host: Friedrich Stricker

Current robotic technologies, despite advances in AI, are inherently limited by the underlying hard materials. To make robots useful for co-work, medical interventions, and care, future robot bodies need to be soft, which requires new approaches on how to control their motions and coordinate their operations. Stimuli-responsive materials are at the heart of a materials revolution in robotics and recent advances in chemical feedback control have enabled ever more complex material behaviors. In this lecture, I will present some of our work on chemically-driven actuators and intelligent materials. Specifically, I will discuss how molecular design and chemical reaction networks enable unexpected behaviors and how these can be harnessed for macroscale motions.

Thursday, November 19, 2026 10:30am - 12:15pm
Office Bldg West / Ground floor / Heinzel Seminar Room (I21.EG.101)

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