SPP2451
Engineered Living Materials
with Adaptive Functions

2nd Annual Meeting – Leibniz-Institute for New Materials, Saarbrücken

TUESDAY, OCTOBER 27, 2026

Building Equitable and Diverse Scientific Environments: Workshops

09:00	*Making Better Hiring Decisions – Creating Fair Opportunities;* Lecturer Sanin Hasibovic Participants: Principal Investigators **Where: Old Library – INM – Leibniz-Institute for New Materials**
09:00	*Raising Awareness of Diversity: Leadership Styles, Communication, and Collaboration in Research Groups;* Lecturer Matthieu Kollig Participants: Early Career Scientists (ECR) -> PhD Students & Postdocs **Where: Aula – Campus Saarbrücken**
12:00	LUNCH – MenSaar Campus Saarbrücken with Voucher

SPP2451 Progress Reports – Aula Campus Saarbrücken

13:10	Welcome & News from the Coordination

Building the Living Material

13:20	Adaptive capsule-based materials for programming engineered living systems
13:35	Adaptive Engineered Bacterial Coacervates
13:50	Self-synthesizing, self-organizing, and stimuli-responsive multi-cell-type Engineered Living Materials based on enzymatic polymerizations on cell surfaces (PolyCell-ELMs)

Sensing & Responding to the Environment

14:05	Combining stimuli-responsive hydrogels and scaffold-supported microbial biofilms for a self-controlled catalytic activity of a microbial leaf
14:20	Living Plasmonics: Distributed environmental sensing with photoluminescent sensor ELM through enzymatic coupling of bacterial sensing with nanoplasmonics
14:35	Living electro-biocatalyst scaffolds for sensing and cleaning – Bacto-click
14:50	COFFEE BREAK

Sensing & Responding to the Environment cont.

15:20	Adaptive Living Seed Coatings
15:35	Smart Stimuli-Responsive Opalescent Bacterial Films (OPAL-Bac)

From Stimulus to Function

15:50	Adaptive biomaterials through mechano-modulating bacteria
16:05	Engineered Living Actuators from Filamentous Cyanobacteria
16:20	Engineering adaptive Vibrio natriegens strains for bacteria-hybrid light-emitting diodes (ENABLED)
16:35	COFFEE BREAK

Living Materials for Biomedical Applications

17:05	ProbioGel as Adaptive Living Skin and Wound Therapeutics
17:20	Living Therapeutic Materials with long term, sonoresponsive and mechanoadaptive function

Fabrication, Manufacturing & Control of Living Materials

17:35	ContainELMs – Material-centric genetic programming of biocontainment in Engineered Living Materials
17:50	SporoPrinting – 3D matrices for immobilizing and controlling functionalized SporoBeads of B. subtilis as a structured protein displaying ELM platform with adaptive functions
18:05	Open questions
18:30	DINNER BUFFET – AC Campus Saarbrücken

WEDNESDAY – FRIDAY OCTOBER 28-30, 2026

ENGINEERED LIVING MATERIALS 2026 Aula of the University of Saarland

28 – 30 October in Saarbrücken