



Annual seminar of the SUSBIO profiling action 2026

22 April, 2026

Paidia, Nokia Arena

Keynote speakers



Senior Scientist Mohammad Peydayesh
ETH Zürich



Prof. Robert Luxenhofer
University of Helsinki



Assist. Prof. Jukka Niskanen
Aalto University



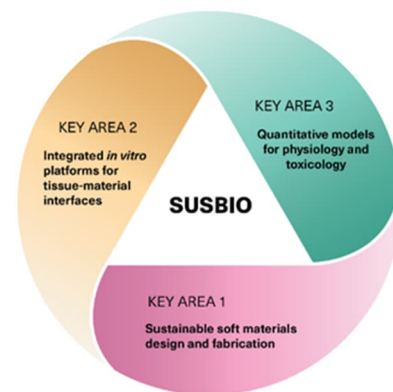
Prof. Dirk Grijpma
University of Twente

SEMINAR PROGRAMME

Registration & morning coffee (8:30-9:00)

Session 1 (9:00-10:25)

- 09:00 – Opening words: Prof. Arri Priimägi**
- 09:05 – Keynote 1: Senior Scientist and Lecturer Mohammad Peydayesh (ETH Zürich)**
Protein nanofibrils-based Materials for a Sustainable Future
- 09:45 – Postdoctoral Research Fellow Burcu Firatligil-Yildirim (ENS, Tampere University)**
Mechanoadaptation in breast tumor microenvironment
- 10:05 – University lecturer Kirsi Rautajoki (MET, Tampere University)**
Photodynamic therapy responses with glioblastoma-on-chip model



Short break (10:25-10:40)

Session 2 (10:40-12:00)

- 10:40 – Keynote 2: Prof. Robert Luxenhofer (University of Helsinki)**
Dynamically crosslinked soft matter towards animal-free tissue and disease models
- 11:20 – Postdoctoral Research Fellow Hanna-Kaarina Juppi (MET, Tampere University)**
Development of an animal-free human alveolar epithelial cell model
- 11:40 – Senior Research Fellow Vijay Parihar (MET, Tampere University)**
Interaction of water-soluble BODIPY derivatives with photofabricated hydrogel scaffolds for enhanced 3D cell imaging

Lunch (12:00-13:00)

Session 3 (13:00-14:30)

- 13:00 – Keynote 3: Assist. Prof. Jukka Niskanen (Aalto University)**
Plastics, biobased polymers, and chemical recycling
- 13:40 – Postdoctoral Research Fellow Konstantin Malafeev (ENS, Tampere University)**
Investigation of the interaction of commercial biodegradable microplastics and biocomposites with human tissue
- 14:00 – Assoc. prof. Eduardo Anaya (MET, Tampere University)**
Colorful supramolecular chemistry at the biomaterials interface

Group Photo (14:20-14:30)

Coffee (14:30-15:00)

Session 4 (15:00-16:00)

- 15:00 – **Keynote 4: Prof. Dirk Grijpma (University of Twente)**
Medisse: commercialising a novel biodegradable polymer implant
Introducing new SUSBIO postdocs:
- 15:40 – **Postdoctoral Research Fellow Sonali Naik (MET, Tampere University)**
Hydrogel mechanics and viscoelasticity from micro to macro scale and the effect of stem cell differentiation
- 15:50 – **Postdoctoral Research Fellow Maisa Vuorte (ENS, Tampere University)**
Cellular uptake and long-term hazards of inhaled nanoplastics
- 16:00 – **Closing words: Prof. Minna Kellomäki**

WELCOME!

☀️ **Upcoming SUSBIO Funding Opportunities** ☀️

🌱 **Seed Funding Call 2027**

Opening in late 2026



Kaikki puhujat:

Ulkopuoliset: 15.2. mennessä puheotsikko/aihe

Senior Scientist Mohammad Peydayesh (ETH Zürich) (30 min talk +10 min discussion):

Protein nanofibrils-based Materials for a Sustainable Future

Assist. Prof. Jukka Niskanen (Aalto University) (30 min talk +10 min discussion)

Plastics, biobased polymers, and chemical recycling

Prof. Robert Luxenhofer (University of Helsinki) (30 min talk +10 min discussion)

Prof. Dirk Grijma (University of Twente) (30 min talk +10 min discussion)

Medisse: commercialising a novel biodegradable polymer implant

Assoc. prof. Eduardo Anaya (Tampere University) (15 min+5min)

Sustainable synthesis and biomolecular recognition of aqueous chromophores

Postdocit (6 kpl.): varmistus 6.2. mennessä + alustava otsikko

Adel Badria (15 min talk + 5 min discussion): Nonlinear optical processes initiated with red/near-infrared light for in-situ 3D printing or postcuring applications (NORPPA) -> *A Novel Framework for Studying Shape-Defined Mesofillers via Additive Manufacturing*

Burcu Firatligil-Yildirim (15 min talk + 5 min discussion): Metastasis-on-chip platform for mechanoadaptation and invasiveness of cancer cells (BreMet)-> *Mechanoadaptation in breast tumor microenvironment*

Maisa Vuorte (7 min talk + 3 min discussion): Cellular uptake and long-term hazards of inhaled nanoplastics (PlasTake) -> *Cellular uptake and long-term hazards of inhaled nanoplastics)??*

Hanna Juppi (15 min talk + 5 min discussion): In vitro models for pulmonary fibrosis based on photoactuating liquid crystal elastomers (PHOTOBREATH) -> *Development of an animal-free human alveolar epithelial cell model*

Naveen Tiwari (15 min talk + 5 min discussion): Self-healing polymer-based on-skin sensors for cardiovascular health and athletic performance measurements (SM-TRACK)

Sonali Naik (7 min talk + 3 min discussion): Hydrogel mechanics and viscoelasticity from micro- to macroscale and the effect on stem cell differentiation (MECHGEL) -> *Hydrogel mechanics and viscoelasticity from micro to macro scale and the effect of stem cell differentiation*

Seed funding (3 kpl.): varmistus 6.2. mennessä

Vijay Parihar & Tero-Petri Ruoko (MET: Interaction of water-soluble BODIPY derivatives with photofabricated hydrogel scaffolds for enhanced 3D cell imaging) **(15 min talk + 5 min discussion)**

Kirsi Rautajoki & Elina Vuorimaa-Laukkanen (MET: Photodynamic therapy responses with glioblastoma-on-chip model) **(15 min talk + 5 min discussion)**

Konstantin Malafeev & Hanna Vuorenperä (ENS: Investigation of the interaction of commercial biodegradable microplastics and biocomposites with human tissue) **(15 min talk + 5 min discussion)**