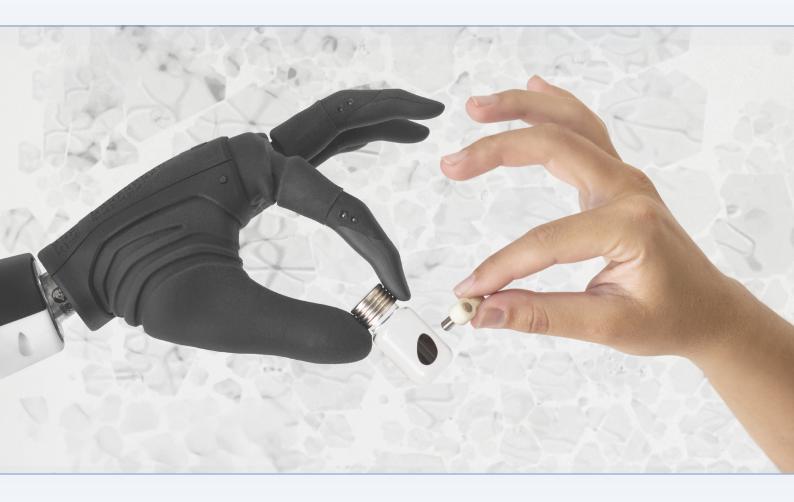


# MAGNELIQ SYMPOSIUM: Magneto-electric liquid – Better sensing

New research directions in soft magneto-electric materials and beyond



We invite researchers to engage in discussions on the future of complex soft materials, including their development, modeling, and applications.



April 10, 2025



9.00-11.00



Jožef Stefan Institute, Ljubljana, Slovenia (Main lecture hall, main building) or online via ZOOM (link to be provided to registered participants)



# New research directions in soft magneto-electric materials and beyond

Join us at the MAGNELIQ Symposium to explore the latest developments in magneto-electric hybrids and liquids:

- Novel magneto-electric materials with tailored properties (and potential applications in sensors, smart materials)
- Advanced modelling tools for optimizing surface chemistry and colloidal interactions

Researchers are encouraged to participate in discussions on future research directions and collaborations.

#### **Schedule**

9.00-9.05	Welcome and introduction
	Darja Lisjak, Project coordinator Jožef Stefan Institute
9.05–9.20	Novel magneto-electric materials
	Speakers: Darja Lisjak & Alenka Mertelj, Jožef Stefan Institute, Ljubljana
9.20–9.40	New polar ligands for electrical sensitization of magnetic oxides and more
	Speaker: Martin Cigl, Institute of Physics Czech Academy of Sciences, Prague
9.40–10.00	Insights into magneto-electric liquids from multi-scale
	Speakers: Layla Martin Samos & Nicolas Sales, Istituto Officina dei Materiali, CNR, Trieste
10.00–11.00	Coffee break & networking
11.00	End of the event

#### Registration

Participation is free, but registration is required.

## **Keywords**

- Liquid magneto-electric materials,
- surface-selective technology,
- ab-initio surface modelling,
- coarse grain modelling,
- modelling of hybrid magneto-electric materials

#### **Opportunities**

Understanding surface-chemistry and colloidal interactions in magneto-electric liquids, computational design of electrically sensitive nanosurfaces and magneto-electric colloids.

#### **Breakthrough beyond MAGNELIQ**

- Hybrid multiferroic liquid for new sensing technologies
- Software add-on for predicting magneto-electric liquid properties

#### **Contact information**

- Magneto-electric materials: Darja Lisjak & Alenka Mertelj
- Organic synthesis: Vladimira Novotna
- Theoretical modeling: Layla Martin Samos

## Project website and social media







