MAGNELIQ

Jožef Stefan Institute
Ljubljana, Slovenia

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)

European Commission

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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

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- **Theoretical modeling: Layla Martin Samos**
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Project website and social media