

MR LATVIA

Innovating Nuclear Magnetic Resonance in the Baltic States

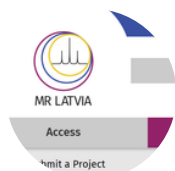


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NEWSLETTER

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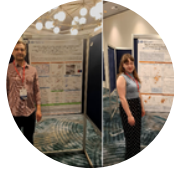
**MR LATVIA ACCESS
Platform is launched**
February 2026



**Seminar
"Metalloproteins and
Interactions Studied by
NMR"**
CERM/ CIRMMP
Infrastructure in Riga
4th February 2026



2nd Resonance Meeting
(Vilnius, Lithuania)
23th - 24th April 2026



**7th Instruct Biennial
Structural Biology
Conference**
(Brussels, Belgium)
27th - 29th May 2026



**MR LATVIA
External Advisory
Board Meeting**
(Riga, Latvia)
June 2026



**Instruct-ERIC and MR LATVIA
Training Course
"Modern NMR for
Biomolecular Interactions:
From Solution and Solid-State
to Hyperpolarization and AI"**
(Riga, Latvia)
8th - 11th June, 2026



**EUROMAR 2026,
the 22nd edition of the
European NMR
Congress**
(Gothenburg, Sweden)
28th June- 2nd July,
2026

MR LATVIA Platform is launched and first results are achieved



Launched in February 2026, the project "Development of Magnetic Resonance in Latvia" (MR LATVIA) opened its first Call for Applications for free access to advanced nuclear magnetic resonance (NMR) research infrastructure. The call is open from 2 February 2026 to 31 August 2027 for academic researchers, PhD candidates, R&D teams, SMEs, and start-ups from the Baltic Sea region.

Implemented in cooperation with leading European NMR centres in Lyon (CNRS-CRMN) and Florence (CERM/CIRMMP), and funded by the Horizon Europe WIDERA programme, MR LATVIA aims to strengthen research excellence and establish Latvia's national NMR research infrastructure.

Selected applicants receive free access to state-of-the-art NMR facilities and expert scientific support for research in structural biology, medicinal and pharmaceutical chemistry, materials science and molecular structure and dynamics. To date, eight user cases have already been successfully completed, demonstrating the infrastructure's growing impact and research capacity.

More information about the call, eligibility, and application process is available at mrlatvia.niri.lv.

EUROMAR 2026 Gothenburg, Sweden



MR LATVIA team was pleased to participate in EUROMAR 2026 in Gothenburg, Sweden.

The team presented two scientific contributions: **Alons Lends** (Poster #334) demonstrated advances in paramagnetic proton-detected solid-state NMR for structural studies of pathogenic fungal samples, while **Alvis Zvirgzdins** (Poster #P343) presented research on ¹⁹F coherence lifetimes and linewidths in fluorinated amino acids using solid-state NMR.

Ruslans Muhamadejevs presented the MR LATVIA ACCESS platform, highlighting opportunities for researchers to access advanced NMR services.

Additionally, EUROMAR 2026 provided valuable discussions with industry partners. Meetings with Bruker focused on future SpinPilot developments, while discussions with JEOL covered autosampler and software configuration topics. Bluefors presented the Cryomech Helium Reliquefier, offering new solutions for reducing helium consumption in NMR laboratories. New qNMR standards from HPC Standards GmbH and advances from CIQTEK highlighted continued innovation in the field.



The conference also showcased growing interest in AI tools for NMR data analysis, enabling faster peak assignment and improved chemical shift prediction.

MR LATVIA Midterm Review

We are delighted to share that the project MR LATVIA has successfully completed its midterm review, and we have received the official assessment results and feedback from the European Commission. We are proud to announce that the review outcome is fully positive, representing a significant achievement and recognition of the dedication, commitment, and excellent collaboration of the entire project team.

All planned deliverables and milestones have been successfully completed and the platform was launched three months ahead of schedule - a remarkable accomplishment that highlights the team's efficiency and strong cooperation. This milestone marks an important step forward for MR LATVIA, and we look forward to building on this success as the project continues. Congratulations and thanks to everyone involved for making this achievement possible!

3rd External Advisory Board Meeting

On 8 June 2026, the External Advisory Board (EAB) of the MR LATVIA project met in Riga to review progress and priorities for advancing magnetic resonance (MR) research, innovation and education in the Baltic region. The Board highlighted the project's growing regional impact, with increased engagement from Estonia and Lithuania, and stressed the importance of collaboration, researcher mobility, shared expertise and access to advanced infrastructure.

Discussions focused on expanding education, scientific partnerships and industry engagement, including joint teaching activities and strengthening expertise in areas such as quantitative NMR, pharmaceutical applications, protein NMR and precision medicine. Future opportunities include NMR-based metabolomics, machine learning, joint Master's projects and continued investment in researchers and technical specialists. The Board gave strong positive feedback, recognising MR LATVIA's potential to become a leading Baltic centre of excellence in magnetic resonance research, education and innovation.



**Key Numbers -
achieved in
22 months**

11 Inter-institutional scientific and management webinars
25 Short term admin-technical-scientific staff visits
3 Hands-on workshops/ Seminars

5 Conferences with Presentation
3 ESR visits
8 ACCESS platform requests

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Seminars & Webinars

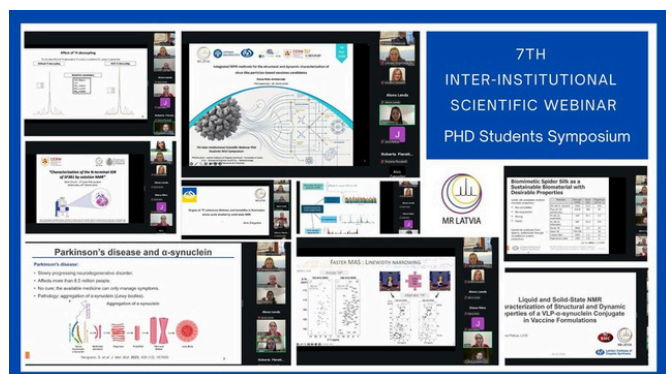


Instruct-ERIC and MR LATVIA joint Training Course "Modern NMR for Biomolecular Interactions: From Solution and Solid-State to Hyperpolarization and AI"



(08/06/2026 - 11/06/2026)

Instruct-ERIC and MR LATVIA hosted the training course "Modern NMR for Biomolecular Interactions: From Solution and Solid-State to Hyperpolarization and AI" in Riga, bringing together 20 participants from 11 countries. The four-day programme combined expert lectures and hands-on training in advanced biomolecular NMR methods, including solution- and solid-state NMR, Dynamic Nuclear Polarization, hyperpolarization, molecular modelling and AI-assisted structure prediction. Participants gained practical experience in NMR data acquisition, analysis, and the integration of experimental and computational approaches for studying complex biomolecular systems.



The 7th Inter-institutional Scientific Webinar on "PhD Students Mini Symposium"

(18/03/2026)



The PhD Student Mini Symposium showcased ongoing research in structural biology and nuclear magnetic resonance (NMR) spectroscopy. **Kristine Senkane** presented NMR studies of spider silk hydrogel formation, **Jana Petkus** discussed structural characterization of virus-like particle- α -synuclein conjugates, **Alvis Zvirgzdins** examined fluorine coherence lifetimes in solid-state NMR, and **Diana Niño Avellaneda** reported on the structural and dynamic characterization of interleukin-31. Guest speakers **Claire Ollier** (CNRS) presented developments in ultrafast magic angle spinning proton-detected solid-state NMR, while **Silvia Olivetti** (CERM/CIRMMP) discussed multidimensional NMR studies of the intrinsically disordered N-terminal region of the SF3B1 protein and its interactions with RNA.



Seminar "Metalloproteins and interactions Studied by NMR"

(04/02/2026)

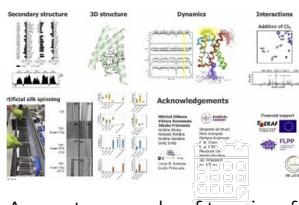
LIOS hosted **Dr. Enrico Ravera** (CERM/CIRMMP, Florence) for the seminar "Metalloproteins and Interactions Studied by NMR."

The presentation delivered a structured view of how paramagnetic effects, often seen as experimental challenges, can be used as information-rich observables for metalloprotein structure, dynamics, and interactions.

Additionally, the seminar also included discussions on collaboration and training opportunities through the CERM/CIRMMP infrastructure in Florence, including potential short research visits and hands-on access to advanced NMR expertise.

The 6th Inter-institutional Scientific Webinar on "Spider silk structural studies with NMR"

(18/02/2026)



Prof. Kristaps Jaudzems presented his latest spider silk research at National Institute of Research and Innovation (NIRI) (ex LIOS), showcasing how NMR spectroscopy is used to study the structure and function of silk proteins.

A great example of turning fundamental science into real-world impact.

Save the dates

8th Inter-institutional Scientific Webinar (8/07/2026-online)

MR LATVIA and consortium partners will be launching a **8th Inter-institutional Scientific webinar in July 2026** led by **CNRS/ CRMN Lyon, France**

9th Inter-institutional Scientific Webinar (09/2026-online)

MR LATVIA and consortium partners will be launching a **9th Inter-institutional Scientific webinar in September 2026** led by **CERM/CIRMMP, Florence, Italy**

5th Inter-Institutional Management Webinar: (10/2026-online)

MR LATVIA and consortium partners will be launching a **5th Inter-institutional Management webinar in October 2026** - led by **CNRS-Lyon, France**

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<http://mrlatvia.niri.lv>

