

NEWSLETTER

Editor-in-chief: Natalja Jarohnovica
Issue 2 - June 2025

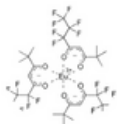
HORIZON-WIDERA-2023-ACCESS-O2



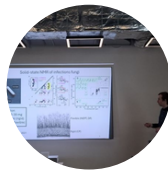
President Rinkevics visited the Laboratory of Physical Organic Chemistry
4th March 2025



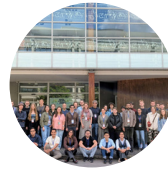
The 2nd Inter-institutional Management Webinar on Best Practices for User Access Handling
16th April 2025



The 2nd Inter-institutional Scientific Webinar on Paramagnetic NMR
19th March 2025



Baltic NMR community: FEBS3+Baltics Conference in Vilnius & Balti Magnet in Tallin
April 2025



PANACEA Spring Hands-On Workshop, Advancing NMR Expertise
19th- 23rd of May 2025



The 3rd Inter-institutional Scientific Webinar on Advanced Solid-State NMR Approaches
11th June 2025



Natalion: Workshop "Interpretation of 2D NMR Spectra of Natural Products"
12th June 2025

A Fruitful April for MR Latvia



A presidential visit to LIOS

We were deeply honored to welcome the President of Latvia, **Edgars Rinkēvičs**, to the **Latvian Institute of Organic Synthesis - 4th April 2025**.

During his visit, President Rinkēvičs toured the Laboratory of Physical Organic Chemistry, where he delved into the **cutting-edge work being carried out in NMR spectroscopy**, including the ongoing activities of MRLATVIA. He also had an engaging exchange of ideas with **Dr. Alons Lends**.

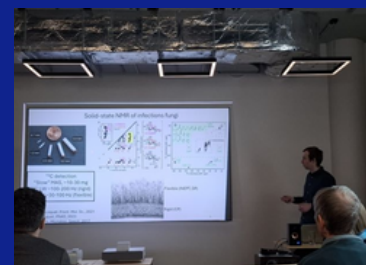
This visit was a tremendous boost for our scientific community. The President's genuine interest, enthusiasm, and steadfast support for research and innovation in Latvia serve as powerful motivation for us all. Thank you, President Rinkēvičs, for your visit— **moments like these encourage us to aim higher and push the boundaries of science in Latvia and beyond!**

Baltic NMR community: FEBS3+Baltics Conference in Vilnius & Balti Magnet in Tallin

Dr. Alons Lends captivated audiences at the **FEBS3+Baltics Conference in Vilnius, Lithuania**, with a powerful presentation on the upcoming NMR platform, drawing widespread interest and sparking conversations throughout the event.

But the journey didn't end there — the momentum carried on as the LIOS team travelled to Tallinn, Estonia, to take part in the inaugural **Balti Magnet conference**.

At both events, the vision for the future NMR platform in Riga turned heads and opened the door to promising **new collaborations across the Baltic region**



SYNERGY & COLLABORATION



PANACEA Spring Hands-On Workshop, Advancing NMR Expertise

Dr. Alons Lends along with PhD students Alvis Zvirgzdins, Diana Nino Avellaneda, and researcher Kristine Senikane, represented **LIOS at the PANACEA Spring Workshop— 19th-23rd of May 2025**.

An intensive **five-day program** hosted by **CNRS Lyon** that brought together **30** international participants, **7** expert speakers, and **9** supervisors. The workshop combined **theoretical lectures, hands-on NMR training**, and expert-led sessions focused on paramagnetic systems, including advanced modules on EPR spectroscopy, pNMR theory, and data analysis using EasyNMR. The experience strengthened our team's capabilities in paramagnetic NMR and fostered connections for future research!



Natalion: Spring Hands-On Workshop, Advancing NMR Expertise

On **June 12** the Latvian Institute of Organic Synthesis hosted the **workshop "Interpretation of 2D NMR Spectra of Natural Products"**, bringing together early-career researchers, chemists, and students for a focused session on advanced NMR techniques.

From the **MR LATVIA** project perspective, it was a pleasure to contribute to this event, which supports the development and application of magnetic resonance in Latvia.

A central highlight was the expert lecture by **Dr. Alons Lends, "NMR Spectroscopy for Organic Chemistry."**

Dr. Alons Lends provided a clear and application-focused overview of NMR Spectroscopy for Organic Chemistry and demonstrated how to use modern AI-powered platforms like **NMRtist** and **Artina** to streamline spectrum interpretation and molecular structure elucidation. His presentation offered practical insights for integrating traditional NMR analysis with next-generation digital tools in both academic and industrial contexts.

Key Numbers - achieved in 10 months

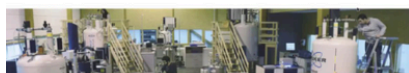
- 5** Inter-institutional scientific and management webinars
- 7** Short term admin-technical-scientific staff visits
- 1** Hands-on workshop

Extra:

- 2** Conferences with Presentation
- 1** Synergy/ Collaboration Seminar

Webinars

User management at CRMN

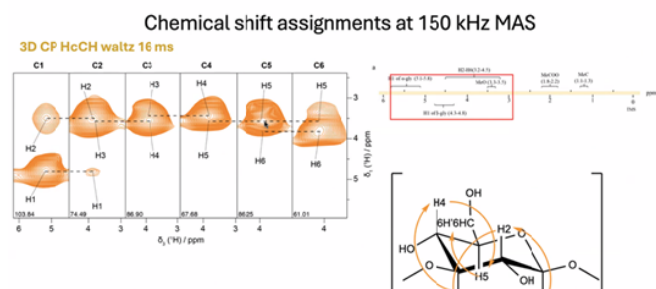


Tangyu Le Marchand - April 16, 2025 - Mr Latvia 2nd Inter-institutional webinar



The 2nd Inter-institutional Management Webinar on Best Practices for User Access Handling - (16/04/2025)

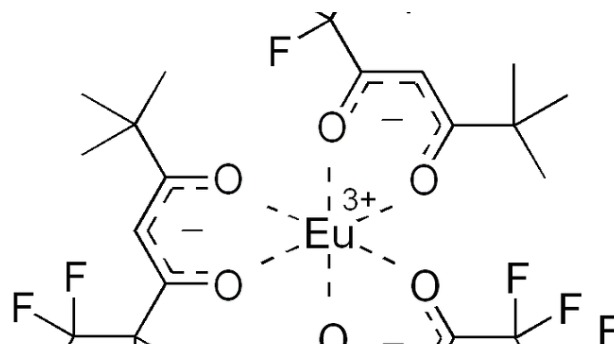
This session highlighted how European research infrastructures are **streamlining user access** through **strategic coordination and digital tools**. CRMN Lyon, ARIA by Instruct-ERIC, and CERM/CIRMMP each showcased innovations—from tailored **workflows** and **cloud-based management** to global service access—making scientific collaboration more **efficient and user-friendly**.



The 3rd Inter-institutional Scientific Webinar on high-impact scientific webinar on advanced NMR spectroscopy (12/06/2025)

Dr. Alons Lends (LIOS) presented research on using **high-frequency, proton-detected solid-state NMR (60–150 kHz MAS)** to study **intact fungal cell walls**. His talk highlighted advances in **resolution** and **sensitivity**, enabling atomic-level insights into key components like **1,3-β-glucans** and distinguishing **α- and β-anomers of polysaccharides**.

The session also covered practical considerations, such as **rotor reuse** and **workflow compatibility** with **ultracentrifugation**, demonstrating how **solid-state NMR** is expanding into **live-cell microbiology** and **antimicrobial research**.



The 2nd Inter-institutional Scientific Webinar on Paramagnetic NMR (19/03/2025)

This session highlighted recent advances in **NMR research** from **CERM-CIRMPP** team. **Prof. Roberta Pierattelli** presented innovative work on **direct 13C13C detection NMR** for **characterizing intrinsically disordered proteins**. **Marco Schiavina** showcased how combining multiple **receiver technology** with **heteronuclear detection** enhances the **study of complex protein interactions**. **Enrico Ravera** shared cutting-edge developments in **paramagnetic NMR**, demonstrating its growing **potential and precision**.

Save the dates



MR LATVIA
@EUROMAR2025
(06-11/07/2025)

MR LATVIA will be attending **EUROMAR 2025** in **Oulu, Finland**- Come and visit us and our expert scientists. We are keen on **meeting the community** and **answering any questions** you might have on our European project.



4th Inter-institutional Scientific Webinar (09/2025-online)

MR LATVIA and consortium partners will be launching a **4th Inter-institutional Scientific webinar** in **September 2025** - led by **CNRS-Lyon**, dates will soon be released- Stay tuned!



4th Inter-Institutional Management Webinar (11/2025-online)

MR LATVIA and consortium partners will be launching a **4th Inter-institutional Management webinar** in **November 2025** - led by **CNRS-Lyon**, dates will soon be released- Stay tuned!

Join the MR LATVIA community -

follow us on social media and our website for more updates



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<http://mrlatvia.osi.lv>

