EARTO INNOVATION AWARDS 2026

attributed to

JSI

DyThera – Unlocking Grid Capacity with Dynamic Thermal Rating

&

CSEM

ORYL F1: Faster solubility testing for drug discovery

Brussels, 10 June 2026

The EARTO Innovation Awards 2026 were given today to EARTO members **JSI** and **CSEM** during a ceremony held in Brussels. JSI received the award in the Impact Delivered category for the development of **DyThera, an advanced Dynamic Line Rating software deployed within the SUMO Dynamic Rating System**. CSEM received the award in the Impact Expected category for the development of **ORYL F1, a high-throughput solubility and aggregation profiling instrument developed in collaboration with ORYL Photonics and the University of Northwestern Switzerland**.

JSI - DyThera

Jožef Stefan Institute
Ljubljana, Slovenia

An advanced Dynamic Thermal rating software to increase grid resilience

DyThera is an advanced Dynamic Line Rating software that supports real-time and forecast-based operation by extending classical thermal models with improved representations of convection, radiation, solar heating, rain, and icing. **A key innovation is its probabilistic approach, incorporating weather and model uncertainties to deliver ampacity forecasts with defined confidence intervals**. It can run as a standalone tool, via an online interface, or integrated into operational control systems. **DyThera enables 20 to 50% higher transmission capacity while maintaining safety clearances. During extreme events such as icing or heat waves, it provides decision support, increasing grid resilience and reducing economic losses.**

CSEM – ORYL F1

csem ORYL

A new profiling instrument to de-risk solubility and aggregation early

ORYL F1 is a high-throughput solubility and aggregation profiling instrument. ORYL F1 detects the earliest stages of molecular aggregation at extremely low concentrations. **The industrial-grade prototype scans a full 384-well plate in about 15 minutes, delivering up to 100× higher throughput while requiring 100× less compound than traditional HPLC-based methods.** By eliminating filtration, separation, and solvent-heavy workflows, **ORYL F1 reduces chemical use by up to 99% and energy consumption by 97%.** It enables faster, greener, and more reliable solubility decisions across a wide range of therapeutics, **allowing researchers to identify viable drug candidates earlier, reduce development risk, and accelerate the delivery of safer, more effective medicines**.

Created in 2009, the EARTO Innovation Awards highlight the various areas of RTOs' activities and illustrate RTOs' concrete contributions to innovation with high societal impact through the two categories: "Impact Delivered" and "Impact Expected". The Awards' independent jury chose the best innovations of the year. Our Jury Members this year were:

Eszter Lakos
Member of the European Parliament

Georg List
Vice President of Corporate Strategy, AVL List GmbH & WG R&I Chair, BusinessEurope

Elisa Rivera
General Director of Planning, Coordination & Knowledge Transfer, Ministry of Science and Innovation of Spain

Michiel Scheffer
President of the Board of the European Innovation Council

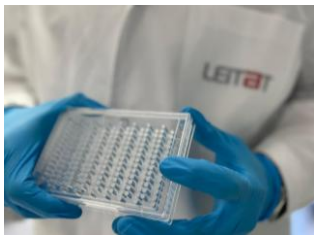
On the same day, EARTO published the 2026 edition of its **Innovation Awards online brochure**, a collection of thirty-two innovations featuring EARTO members, which gives a flavour of the wide range of RTOs' work. Such innovations demonstrate RTOs' capacity to support Europe's innovation performance and their focus on solving today's challenges and delivering impact. The brochure includes articles on all RTOs that took part in this year's competition, as well as articles on the RTOs International Network (RIN), with a special focus on the 6 finalists, which are, in addition to the two above-mentioned winners:

IMPACT DELIVERED – 2ND PRIZE

LIST – magSIMS is an advanced mass spectrometer built on a decade of RD&I in ion–matter interactions, charged-particle optics, instrument development, and field testing. Its unique performance makes it the leading tool for nanometre-scale structural and chemical analysis. The magSIMS technology is a successful industrial transfer, used daily in world-class institutes.

IMPACT DELIVERED – 3RD PRIZE

INESC TEC – AIR is an AI acceleration platform that combines reusable AI libraries, scalable orchestration and customisable interfaces to deliver planning, sizing and scheduling solutions, enabling decision-makers to extract tangible value from AI at scale. AIR has already been applied in over 190 industrial projects across 20+ countries, delivering cost reductions of up to 40% and multi-million-euro annual savings.



IMPACT EXPECTED – 2ND PRIZE

LEITAT – OGYX is a gravity-driven microfluidic Organ-on-a-Chip plate that combines high-throughput screening with advanced biology. Its membrane-free design supports 2D/3D co-cultures without pumps or tubing, is scalable by injection moulding, and intuitive to set up, monitor, and analyse. By aligning cutting-edge microfluidics with EU regulations, Leitat's platforms enable robust, cost-effective, non-animal drug discovery and personalised medicine.

IMPACT EXPECTED – 3RD PRIZE

TECNALIA – FATRIXGEL is a 100% human-derived hydrogel that mimics the native extracellular matrix with high fidelity, enabling physiologically relevant 3D cultures through a patented, scalable decellularisation process that preserves up to 90% of native ECM proteins, including basement membrane components. By replacing unreliable matrices, FATRIXGEL accelerates drug discovery, reduces animal testing, and improves therapeutic development.

Full EARTO Innovation Awards 2026 brochure available here.

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EARTO Innovation Awards have been given since 2009 to illustrate RTOs' key contribution to innovation. Two categories have been created: Impact Delivered and Impact Expected. The Impact Delivered Award is given to an innovation already in the market and which has proven its impact on Europe's economy and/or society, while the Impact Expected category rewards an innovation which is not yet on the market but has great potential.

RTOs - Research and Technology Organisations:
From the lab to your everyday life. RTOs innovate to improve your health and well-being, your safety and security, your mobility and connectivity. RTOs' technologies cover all scientific fields. Their work ranges from basic research to new products and services' development. RTOs are non-profit organisations whose core mission is to produce, combine and bridge various types of knowledge, skills and infrastructures to deliver a range of research and development activities in collaboration with public and industrial partners of all sizes. These activities aim to result in technological and social innovations and system solutions that contribute to and mutually reinforce their economic, societal and policy impacts.

EARTO - European Association of Research and Technology Organisations: Founded in 1999, EARTO promotes RTOs and represents their interest in Europe. EARTO network counts over 350 RTOs in more than 32 countries. EARTO members represent 228,000 highly-skilled researchers and engineers managing a wide range of innovation infrastructures.

JSI is the leading Slovenian scientific research institute, covering a broad spectrum of basic and applied research in natural sciences, life sciences and engineering, experimental development, and technology transfer, including environmental monitoring, biosensing, and analytical technologies.

CSEM is a Swiss technology innovation centre that develops and transfers advanced technologies with high societal impact to industry.