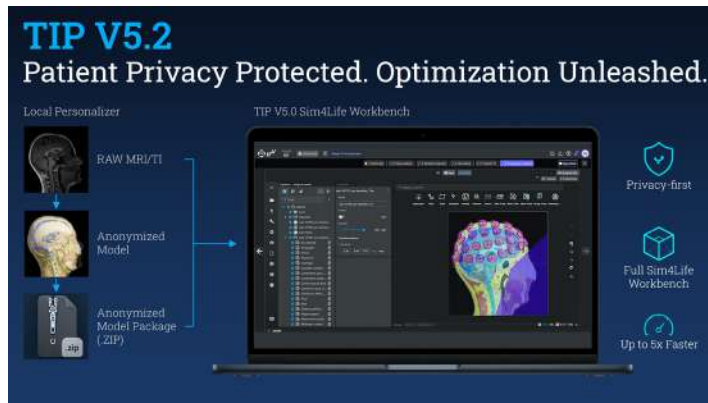
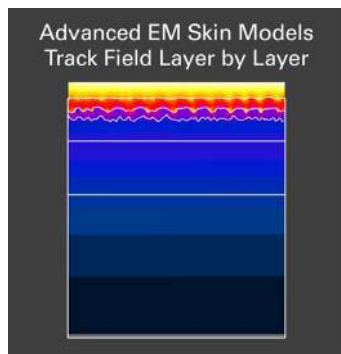


## TEMPORAL INTERFERENCE



Check out the latest updates to our online platform for planning temporal interference stimulation studies! [TIP V5.2](#) features three complementary improvements, unlocking denser and superior Pareto fronts, ensuring realizable electrode configurations, and enabling flexible, tunable trade-offs between speed and comprehensiveness.

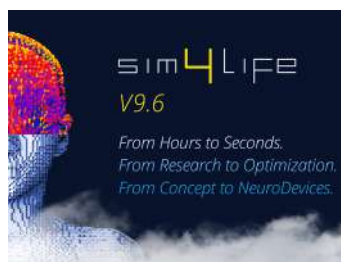
## PUBLICATIONS



In our recent [publication](#) we introduce a method to build realistic, individualized 3D skin models from optical coherence tomography and ultrasound imaging data. This approach improves the accuracy of millimeter-wave skin dosimetry and supports future safety and medical applications. It is the latest

study arising from the [SEAWave](#) project, and was carried out in collaboration with our colleagues at the Aristotle University of Thessaloniki and the Centre hospitalier universitaire Vaudois.

## SIMULATIONS



[Sim4Life V9.6](#) removes a long-standing computational bottleneck in neurostimulation modeling: the time it takes to model neural activation in biophysical detail. V9.6 extends nerve response modeling accelerated by the

generalized activating function to clinically realistic double-cable axons, with automated recruitment-curve analysis and enhanced platform performance. What does this mean in practice? Nerve recruitment analyses that once took hours or days now finish in minutes on a standard machine.

## MEASUREMENTS



We are pleased to announce that the Swiss Accreditation Service (SAS) has extended the scope of SPEAG's ISO 17025 accreditation (SCS 0108) to include calibration of absorbed power density (APD) probes and system verification/validation sources, as well as DAK-R calibration and low loss thin material dielectric characterization from 10 – 45 GHz. With these additions, SPEAG provides the regulatory basis for frequency range (FR) 2 and FR3 APD compliance testing with DASY8 Module APD. Find out more [here](#).



With [DASY8 Module SAR V18.0](#), SPEAG unlocks a new level of testing efficiency, introducing major advancements in Multi-TX testing and total exposure ratio (TER) evaluations. This latest version enables reliable assessment of TER for specific absorption rate (SAR) and APD at frequencies of up to 10 GHz, with no need for time-consuming large-volume scans. The novel smart spatial-average SAR/APD (sSAR/sAPD) feature maintains a high level of accuracy while completing full-area measurements faster than ever before.

## o<sup>2</sup>S<sup>2</sup>PARC



IT'IS has successfully completed the o<sup>2</sup>S<sup>2</sup>PARC project under the U.S. NIH SPARC program, [concluding more than 8 years of funding and collaboration](#). Over this time, o<sup>2</sup>S<sup>2</sup>PARC has grown into a mature, open-access cloud platform for multiscale, multi-physics neuromodulation and physiology modeling, integrating advanced data analysis pipelines and interactive workflows, with over 130 tools onboarded and more than 3000 users worldwide. As NIH Common Fund support has ended, the platform is now hosted by ZMT – as technical host only – supporting the long-term sustainability of this important scientific resource.

## STANDARDS

### Updates from the TCB Council Workshop of April 14 – 16

#### Power Density Compliance Test Setup (IV)

**Evaluation Distance vs. Use Conditions (Including TER)**

- Evaluation and measuring distances from the DUT for an IPD probe system using a numerically processing tool.
- Applicable SAR settings are also shown for TER evaluations.

Use Condition Exposure	SAR Photon Distance and Volume Average	IPD Evaluation Plane Distance	Probe Sense Distance
Near to ear, extremities	0 mm, 10-g avg.	0 mm	minimum possible (manufacturer-specified)
Body	≤ 5 mm, 1-g avg.	≤ 5 mm	≤ 5 mm
Front of face	≤ 25 mm, 1-g avg.	≤ 25 mm	≤ 25 mm

Distances are measured from the DUT surface.  
 Test are repeated for each applicable side of the DUT.  
 For consistency IPD evaluations, body-response-SAR when used along with IPD for TER evaluations is limited to 5 mm. "run up to 25 mm body holder" provisions are applicable.

In April, the [Telecommunications Certification Body \(TCB\) Workshop](#) introduced new rules on radiofrequency exposure as well as Federal Communications Commission (FCC) proposals, particularly regarding camera protrusions, 0 mm power density evaluation, and the incorporation of probe array systems into SAR compliance assessments. SPEAG, together with IT'IS, has already initiated scientific work leading to revised DASY implementations and data collection methods to enable robust testing to meet these new requirements.

## ANNUAL REPORT



The IT'IS Foundation 2025 Annual Report was published in March! Dive into the year of discoveries, collaborations, and breakthroughs that propelled our research forward and the teamwork that made it all possible. Haven't read it yet? Download your digital copy [here](#).

## Z43



Design meets sustainability: We are delighted to share the successful completion of Z43's Green Solar Pergola at our Zurich headquarters. The pergola project combines minimalist architecture, sustainability, and forward-looking design, turning an underused balcony into a vibrant, climate responsive outdoor workspace. To learn more and view additional images, visit the [IT'IS website](#) to take an immersive 360° drone tour.

## RESEARCH

### PUBLICATIONS

**Comments on "Experimental Evaluation of Relationship Between Radiofrequency Heating Near Implanted Conductive Devices, Scanner-Reported B<sub>1+rms</sub>, and Transmit Power"**

M. Steckner, *et al.*, 2026, IEEE Journal of Microwaves, doi: [10.1109/JMW.2026.3666625](https://doi.org/10.1109/JMW.2026.3666625) (online 17 March 2026)

**A High-Efficiency Magnetolectric Power Link with a Load-Adaptive CMOS Rectifier for Miniaturized Implants**

Y. Engür, *et al.*, 2026, IEEE Solid-State Circuits Letters, doi: [10.1109/LSSC.2026.3679620](https://doi.org/10.1109/LSSC.2026.3679620) (online 31 March 2026)

**A Novel Framework for Realistic 3D Skin Modeling and its Exposure to Millimeter Waves**

S. Iakovidis, *et al.*, 2026, IEEE Journal of Microwaves, doi: [10.1109/JMW.2026.3684941](https://doi.org/10.1109/JMW.2026.3684941) (online 04 May 2026)

**Early-life Exposure to 27.5 GHz 5G Millimeter-Wave Radiation Induces Skin-Related Biological Responses in Mice**

F. Palone, *et al.*, 2026, Scientific Reports, doi: [10.1038/s41598-026-57133-w](https://doi.org/10.1038/s41598-026-57133-w) (online 08 June 2026)

**Enhancement of Sleep Slow Wave Activity using Transcranial Electrical Stimulation with Temporal Interference: An Interim Analysis of the STRENGTHEN Study**

E. L. Schaeffer, *et al.*, Communications Medicine, *accepted*

**Biodegradable Smart Face Mask for Cough Acoustic Sensing**

M. J. Bathaei, *et al.*, ACS Sensors, *accepted*